

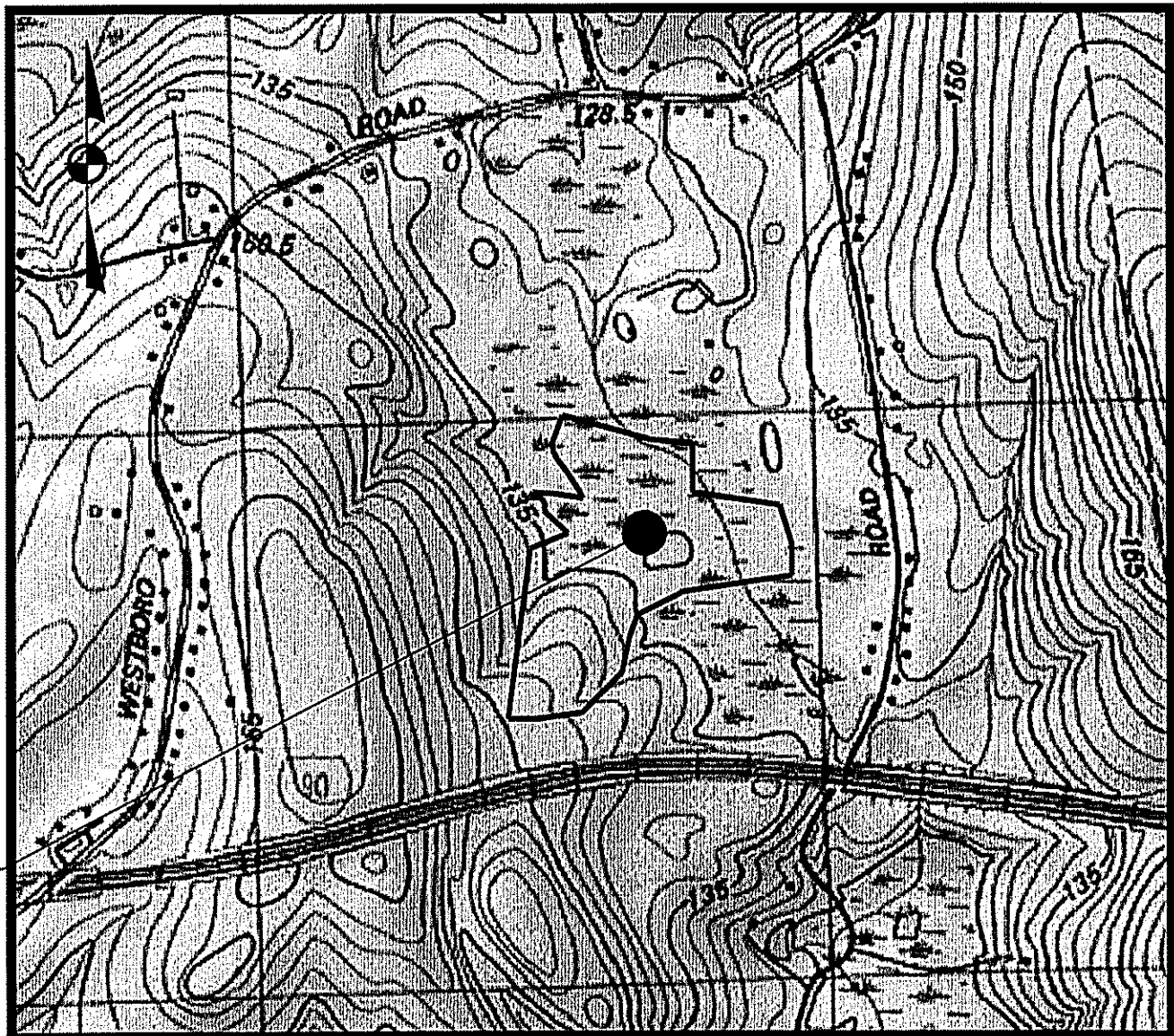
Definitive Conventional Subdivision Plans

June 10, 2016 (Revised November 22, 2016)

Estates at Bull Meadow

North Grafton, Massachusetts 01536

PROJECT SITE



SCALE: 1"=1000'±
ZONING DISTRICT: R40

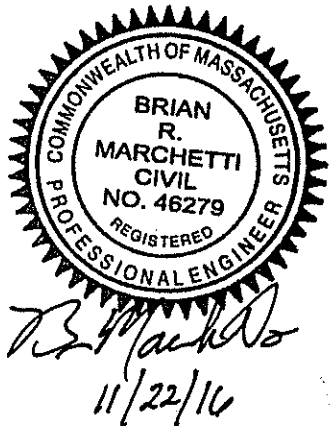
Applicant:
Bull Meadow, LLC.
2 Rachel Road
Boylston, MA 01505
(978)833-4747

Record Owner:
Bull Meadow, LLC.
Mr. Gordon Lewis, Manager
2 Rachel Road
Boylston, MA 01505
(978) 833-4747

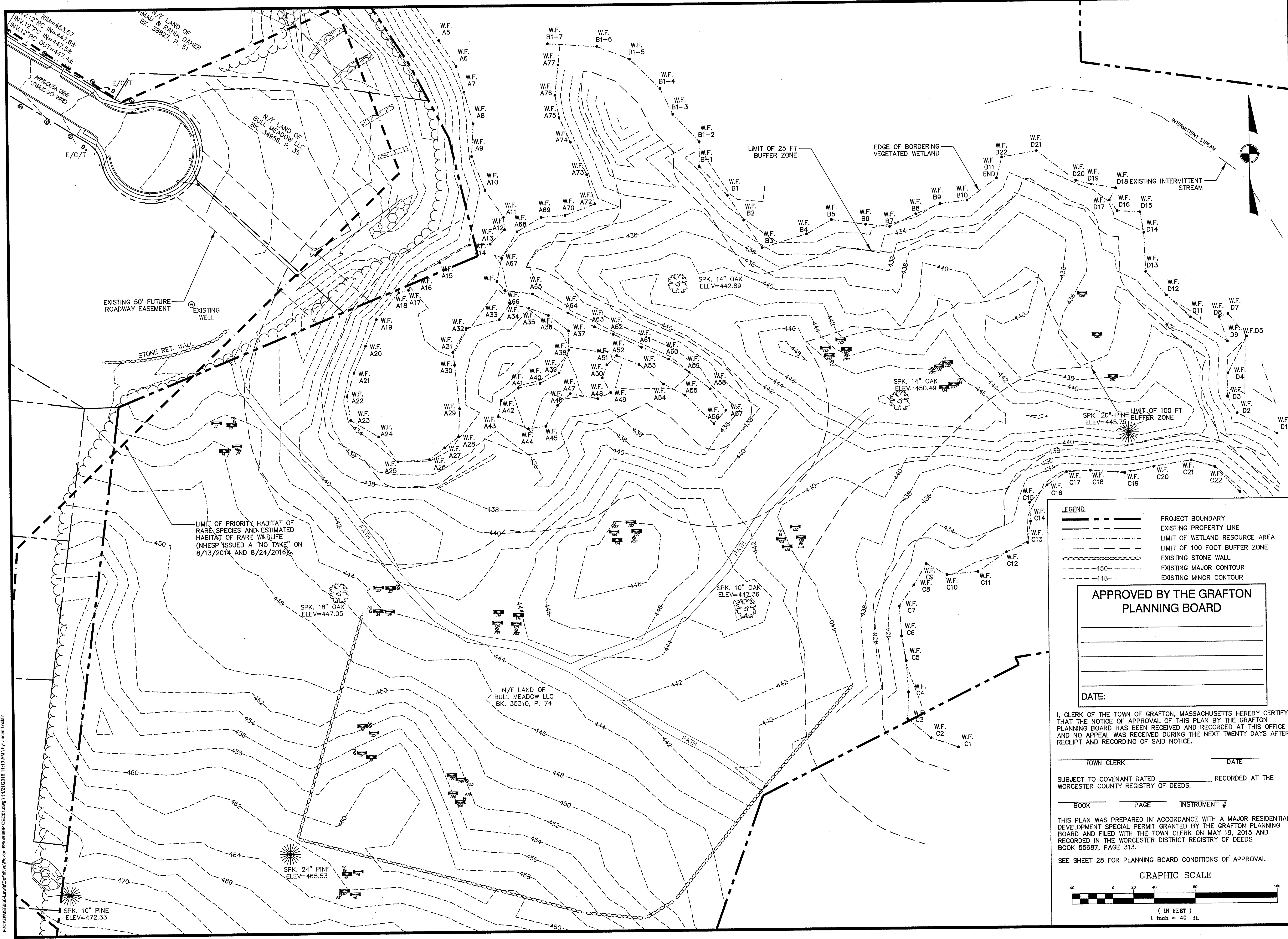
Civil Engineer:
McCarty Engineering, Inc.
42 Jungle Road
Leominster, MA 01453
(978) 534-1318

Surveyor:
Whitman & Bingham Associates, LLC.
510 Mechanic Street
Leominster, MA 01453
(978) 537-5296

Wetland Consultant:
EcoTec, Inc.
102 Grove Street
Worcester, MA 01605
(508)752-9494



Sheet	Sheet Title
	Cover Sheet
1	Existing Conditions Survey (1 of 2)
2	Existing Conditions Survey (2 of 2)
3	Lotting Plan (1 of 4)
4	Lotting Plan (2 of 4)
5	Lotting Plan (3 of 4)
6	Lotting Plan (4 of 4)
7	Overall Subdivision Plan (1 of 3)
8	Layout and Materials Plan (2 of 3)
9	Layout and Materials Plan (3 of 3)
10	Grading and Drainage Plan (1 of 2)
11	Grading and Drainage Plan (2 of 2)
12	Utility Plan (1 of 2)
13	Utility Plan (2 of 2)
14	Roadway and Utility Profiles (1 of 4)
15	Roadway and Utility Profiles (2 of 4)
16	Roadway and Utility Profiles (3 of 4)
17	Roadway and Utility Profiles (4 of 4)
18	Water Main Extension Plan
19	Erosion Control Plan (1 of 2)
20	Erosion Control Plan (2 of 2)
21	Wetland Crossing and Replication Plan
22	Construction Phasing Plan
23	Construction Details (1 of 4)
24	Construction Details (2 of 4)
25	Construction Details (3 of 4)
26	Construction Details (4 of 4)
27	Stormtech Detail Sheet
28	Conditions of Approval



NOT FOR CONSTRUCTION
THESE PLANS WERE PREPARED FOR THE PURPOSE OF OBTAINING STATE AND LOCAL PERMITS AND ARE NOT INTENDED TO BE USED AS CONSTRUCTION DOCUMENTS.

PREPARED FOR:
BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

2	11/22/2016	TOWN COMMENTS
1	10/11/2016	TOWN COMMENTS
No.	Date	Revision



73. Marchetti 11/22/16

Drawn By: BRM Designed By: BRM Checked By: BRM

- LEGEND**
- PROJECT BOUNDARY
 - EXISTING PROPERTY LINE
 - LIMIT OF WETLAND RESOURCE AREA
 - LIMIT OF 100 FOOT BUFFER ZONE
 - EXISTING STONE WALL
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR

APPROVED BY THE GRAFTON PLANNING BOARD

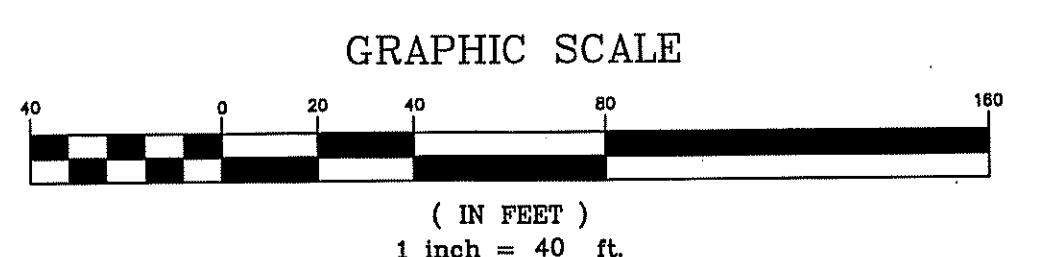
DATE:

I, CLERK OF THE TOWN OF GRAFTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE GRAFTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE NEXT TWENTY DAYS AFTER RECEIPT AND RECORDING OF SAID NOTICE.

TOWN CLERK _____ DATE _____
SUBJECT TO COVENANT DATED _____ RECORDED AT THE
WORCESTER COUNTY REGISTRY OF DEEDS.
BOOK _____ PAGE _____ INSTRUMENT # _____

THIS PLAN WAS PREPARED IN ACCORDANCE WITH A MAJOR RESIDENTIAL DEVELOPMENT SPECIAL PERMIT GRANTED BY THE GRAFTON PLANNING BOARD AND FILED WITH THE TOWN CLERK ON MAY 19, 2015 AND RECORDED IN THE WORCESTER DISTRICT REGISTRY OF DEEDS BOOK 55687, PAGE 313.

SEE SHEET 28 FOR PLANNING BOARD CONDITIONS OF APPROVAL



McCarty Engineering, Inc.
Civil Engineers
42 Jungle Road, Leominster, MA 01453
phone:(978) 534-1318 fax: (978) 840-6907
www.mccartydb.com

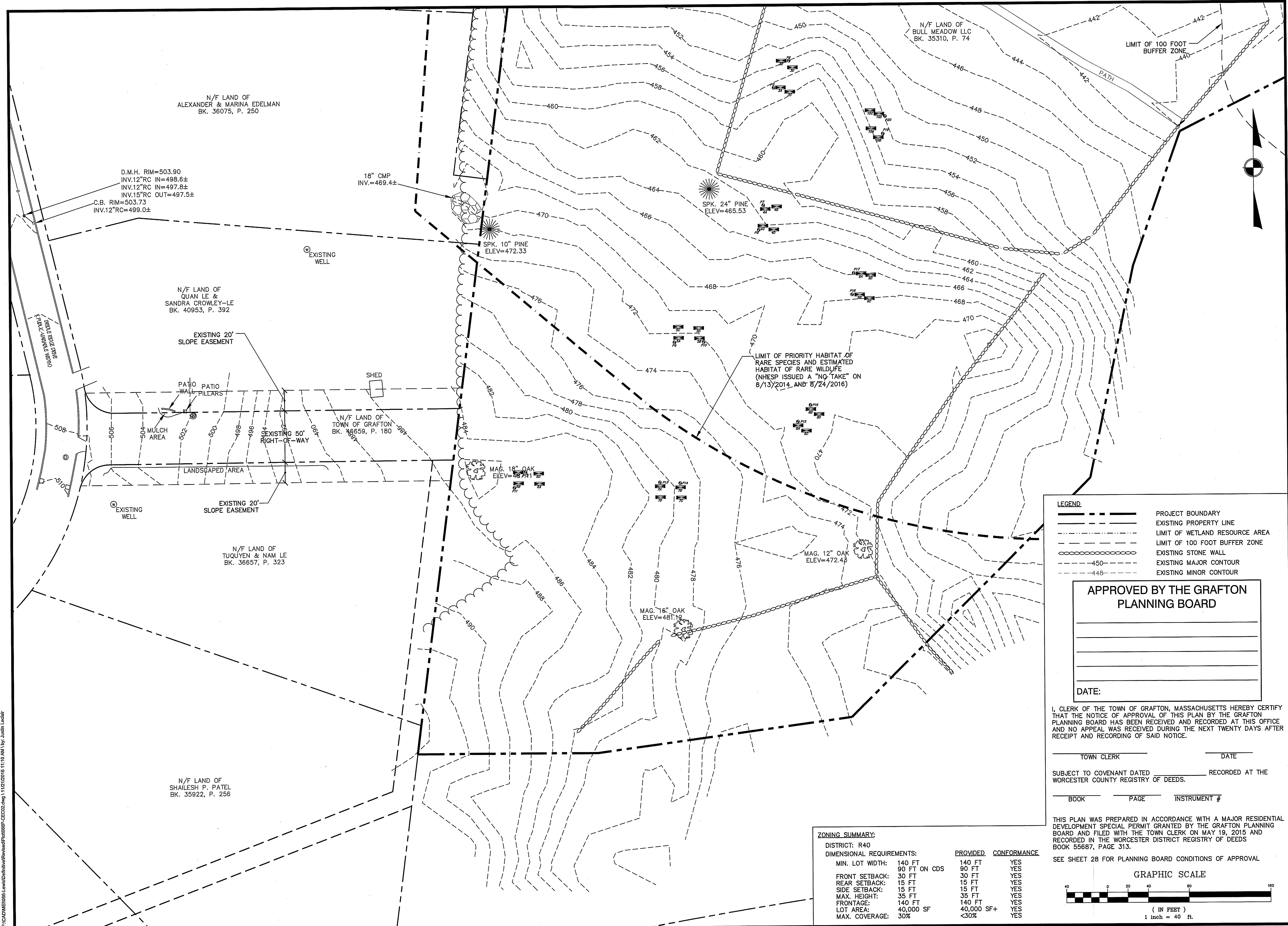
Project Name
**Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536**

Sheet Title
**Existing Conditions
Survey
(1 of 2)**

Job No: 066 Sheet No:
File Name: 066P-CEC01 **1**
Date: June 10, 2016
Scale: 1"=40' OF 28

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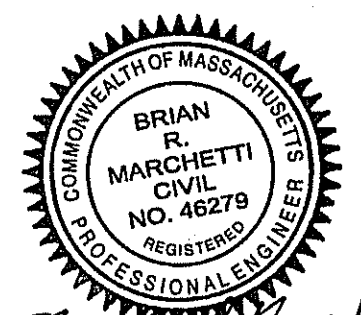
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NOT FOR CONSTRUCTION
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PREPARED FOR:
BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

No.	Date	Revision
2	11/22/2016	TOWN COMMENTS
1	10/11/2016	TOWN COMMENTS



Drawn By: BRM
Designed By: BRM
Checked By: *BRM*

LEGEND
PROJECT BOUNDARY
EXISTING PROPERTY LINE
LIMIT OF WETLAND RESOURCE AREA
LIMIT OF 100 FOOT BUFFER ZONE
EXISTING STONE WALL
EXISTING MAJOR CONTOUR
EXISTING MINOR CONTOUR

APPROVED BY THE GRAFTON PLANNING BOARD

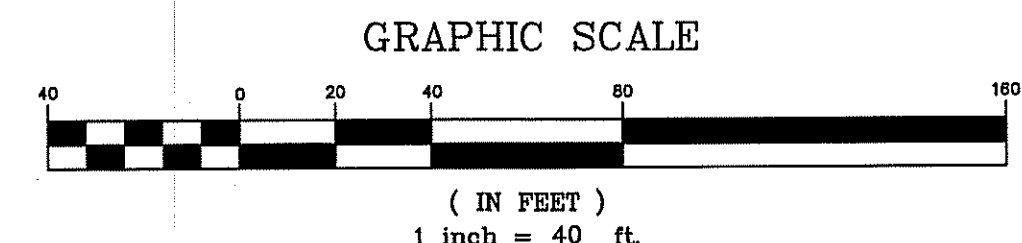
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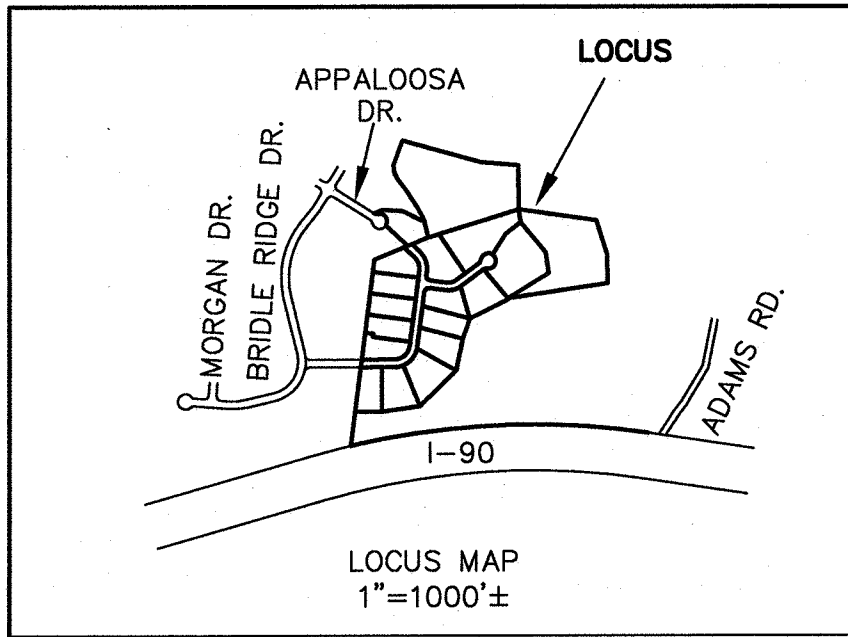
TOWN CLERK _____ DATE _____
SUBJECT TO COVENANT DATED _____ RECORDED AT THE WORCESTER COUNTY REGISTRY OF DEEDS.
BOOK _____ PAGE _____ INSTRUMENT # _____

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SEE SHEET 28 FOR PLANNING BOARD CONDITIONS OF APPROVAL



ZONING SUMMARY:			
DISTRICT: R40			
DIMENSIONAL REQUIREMENTS:			
MIN. LOT WIDTH:	140 FT	140 FT	YES
	90 FT ON CDS	90 FT	YES
FRONT SETBACK:	30 FT	30 FT	YES
REAR SETBACK:	15 FT	15 FT	YES
SIDE SETBACK:	15 FT	15 FT	YES
MAX. HEIGHT:	35 FT	35 FT	YES
FRONTAGE:	140 FT	140 FT	YES
LOT AREA:	40,000 SF	40,000 SF+	YES
MAX. COVERAGE:	30%	<30%	YES



APPROVED BY THE GRAFTON
PLANNING BOARD DATE: _____

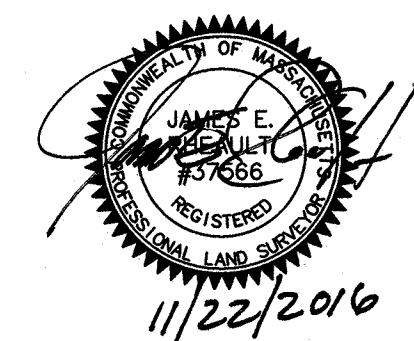
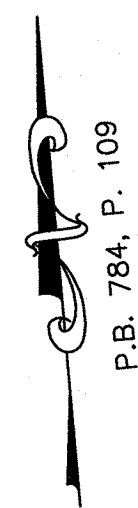
NOTES:

1. OWNER/APPLICANT: BULL MEADOW, LLC
BK. 53605, P. 383
BK. 35310, P. 74
BK. 34958, P. 35
2. PLAN REFERENCES: P.B. 750, P. 55
P.B. 784, P. 109
P.B. 799, P. 108
P.B. 911, P. 97
3. THE SUBJECT PREMISES IS GRAPHICALLY SITUATED IN THE R-40 ZONING DISTRICT WITH THE FOLLOWING MINIMUM DIMENSIONAL REQUIREMENTS:
MINIMUM LOT AREA: 40,000 S.F.
MINIMUM LOT FRONTAGE: 140 FT.
MINIMUM FRONT SETBACK: 30 FT.
MINIMUM SIDE SETBACK: 15 FT.
MINIMUM REAR SETBACK: 15 FT.
4. THE SUBJECT PREMISES IS NOT GRAPHICALLY SITUATED IN THE 100-YEAR FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAPS 25027C0831F AND 25027C0832F DATED JULY 16, 2014.
5. OPEN SPACE PARCELS A AND B ARE NOT TO BE CONSIDERED BUILDING LOTS, NO FURTHER BUILDING MAY OCCUR WITHOUT FURTHER APPROVAL BY THE PLANNING BOARD PURSUANT TO THE SUBDIVISION CONTROL LAW.
6. SEE SHEET 28 FOR PLANNING BOARD CONDITIONS OF APPROVAL.

□ DENOTES GRANITE BOUND TO BE SET

I HEREBY CERTIFY THAT NO NOTICE OF APPEALS WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER THE RECEIPT AND RECORDING OF THE NOTICE FROM THE GRAFTON PLANNING BOARD OF THE APPROVAL OF THIS PLAN.

TOWN OF GRAFTON CLERK _____ DATE _____



I CERTIFY THAT THIS PLAN MEETS WITH
REGULATIONS OF REGISTERS OF DEEDS

ESTATES AT BULL MEADOW
DEFINITIVE SUBDIVISION PLAN OF LAND

IN GRAFTON, MA

PREPARED FOR

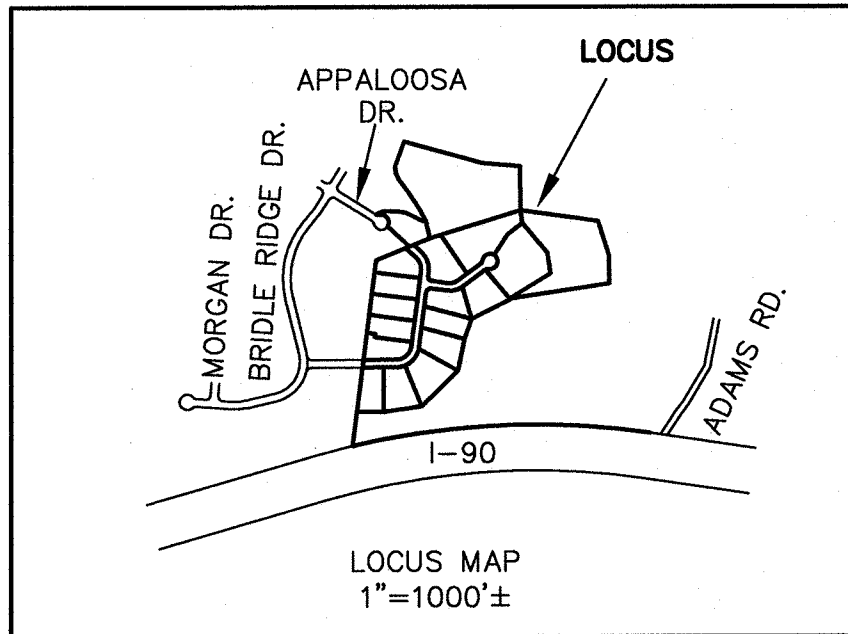
BULL MEADOW, LLC

JUNE 10, 2016



WHITMAN & BINGHAM ASSOCIATES, LLC
REGISTERED PROFESSIONAL ENGINEERS & LAND SURVEYORS
510 MECHANIC STREET - LEOMINSTER, MASSACHUSETTS 01453

REVISED 10-11-16
REVISED 11-22-16



APPROVED BY THE GRAFTON
PLANNING BOARD DATE: _____

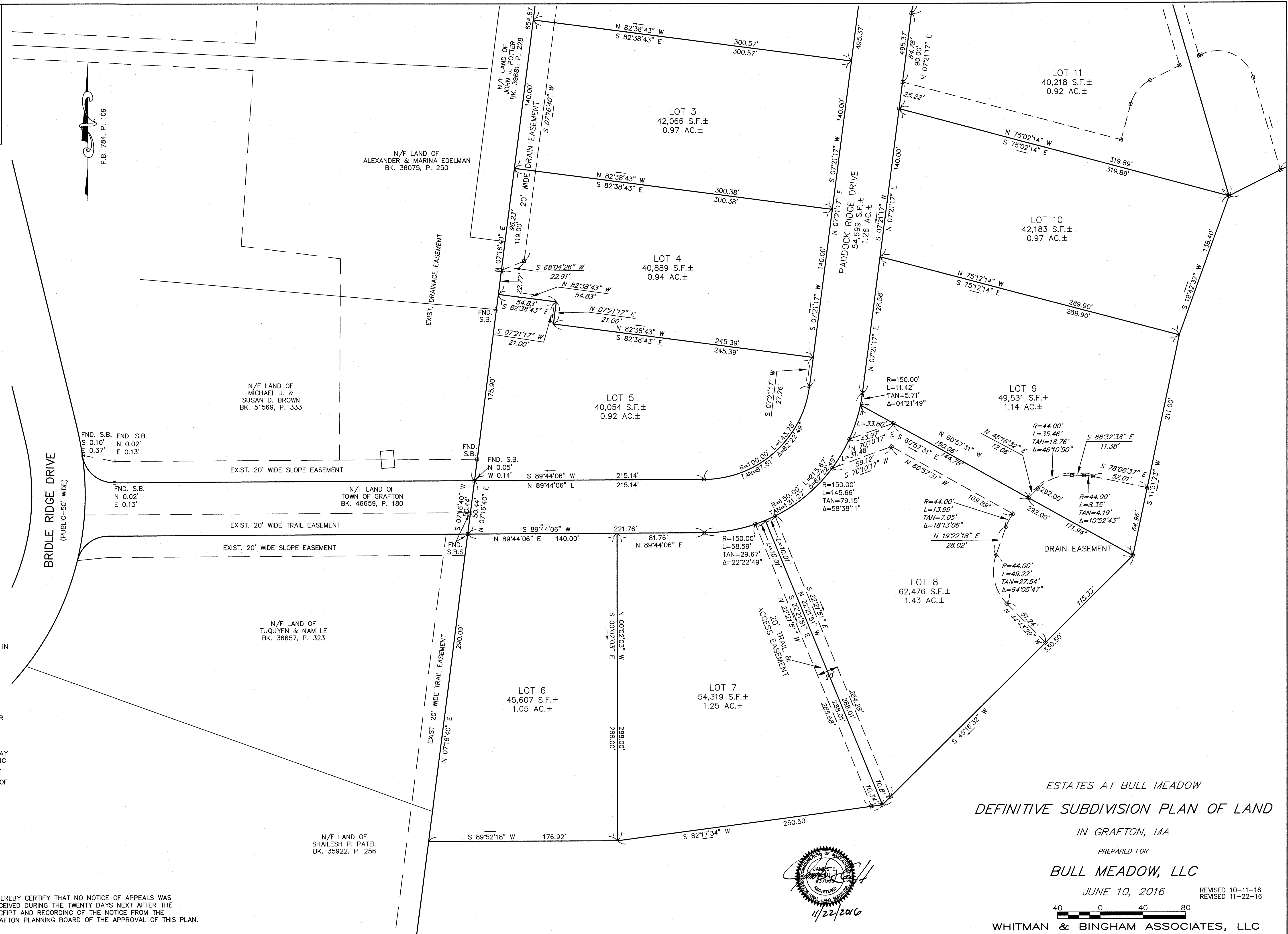
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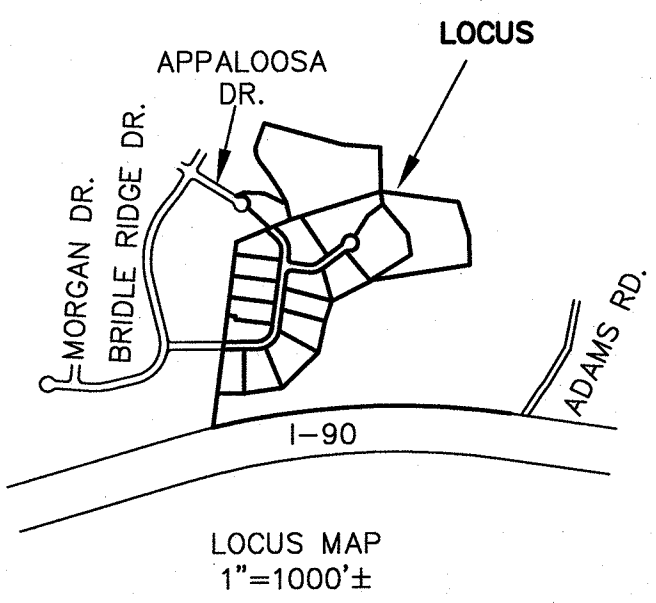


I CERTIFY THAT THIS PLAN MEETS WITH
REGULATIONS OF REGISTERS OF DEEDS

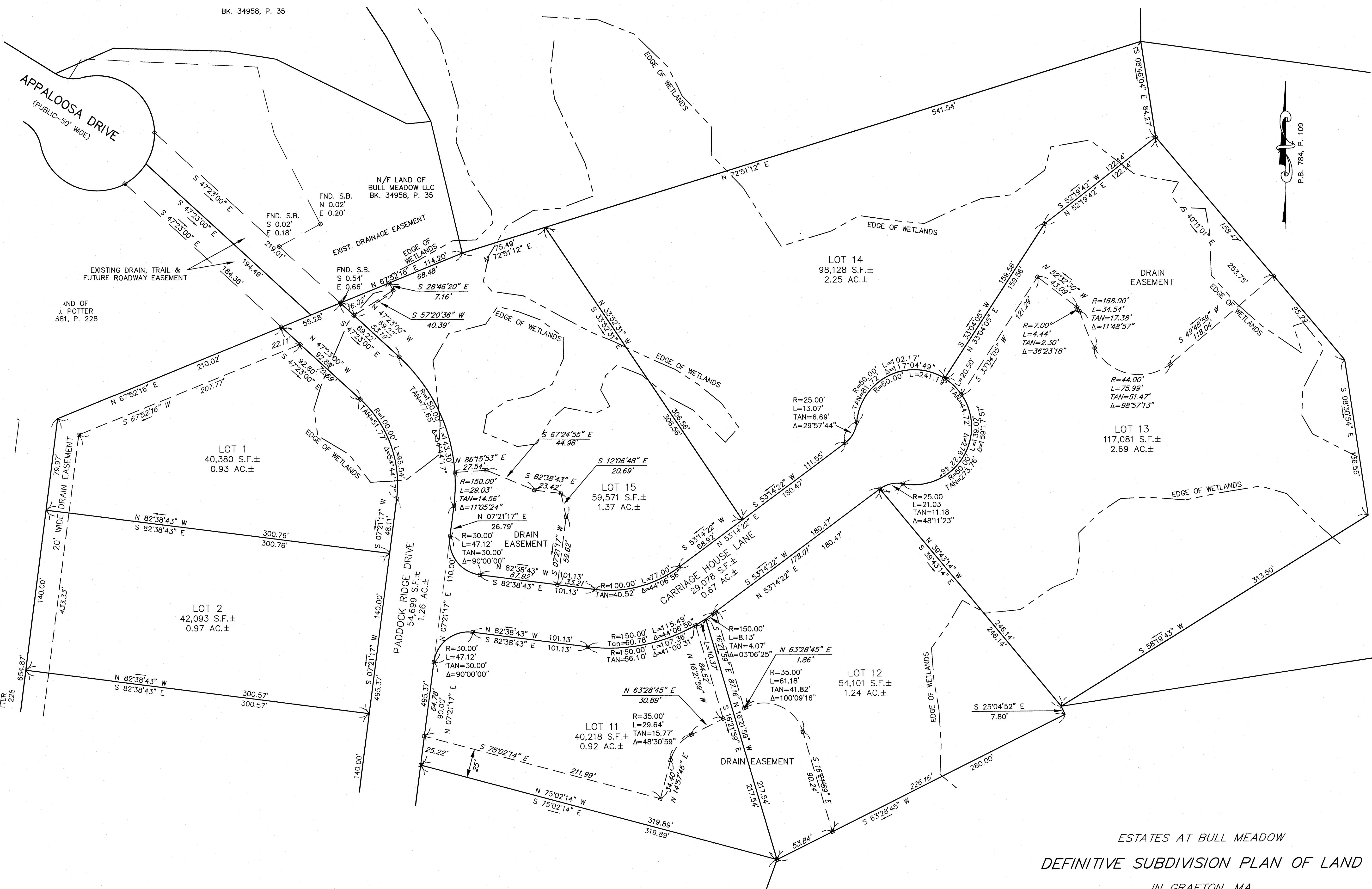
SHEET 4 OF 28

WHITMAN & BINGHAM ASSOCIATES, LLC
REGISTERED PROFESSIONAL ENGINEERS & LAND SURVEYORS
510 MECHANIC STREET - LEOMINSTER, MASSACHUSETTS 01453

31-D-39



BK. 34958, P. 35



APPROVED BY THE GRAFTON
PLANNING BOARD DATE: _____

- NOTES:
1. OWNER/APPLICANT: BULL MEADOW, LLC
BK. 53605, P. 383
BK. 35310, P. 74
BK. 34958, P. 35
 2. PLAN REFERENCES: P.B. 750, P. 55
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TOWN OF GRAFTON CLERK _____ DATE _____



I CERTIFY THAT THIS PLAN MEETS WITH
REGULATIONS OF REGISTERS OF DEEDS

ESTATES AT BULL MEADOW
DEFINITIVE SUBDIVISION PLAN OF LAND
IN GRAFTON, MA

PREPARED FOR
BULL MEADOW, LLC

JUNE 10, 2016

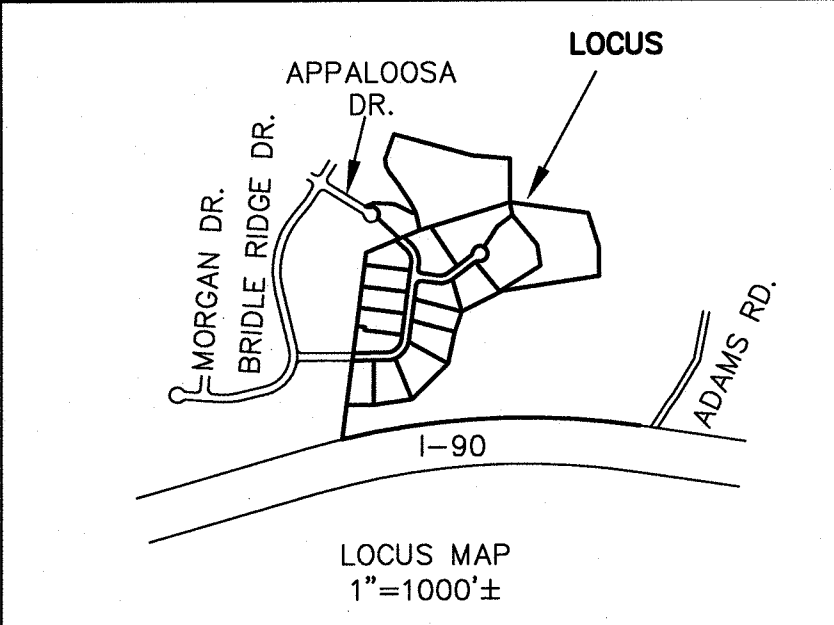
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WHITMAN & BINGHAM ASSOCIATES, LLC
REGISTERED PROFESSIONAL ENGINEERS & LAND SURVEYORS
510 MECHANIC STREET - LEOMINSTER, MASSACHUSETTS 01453

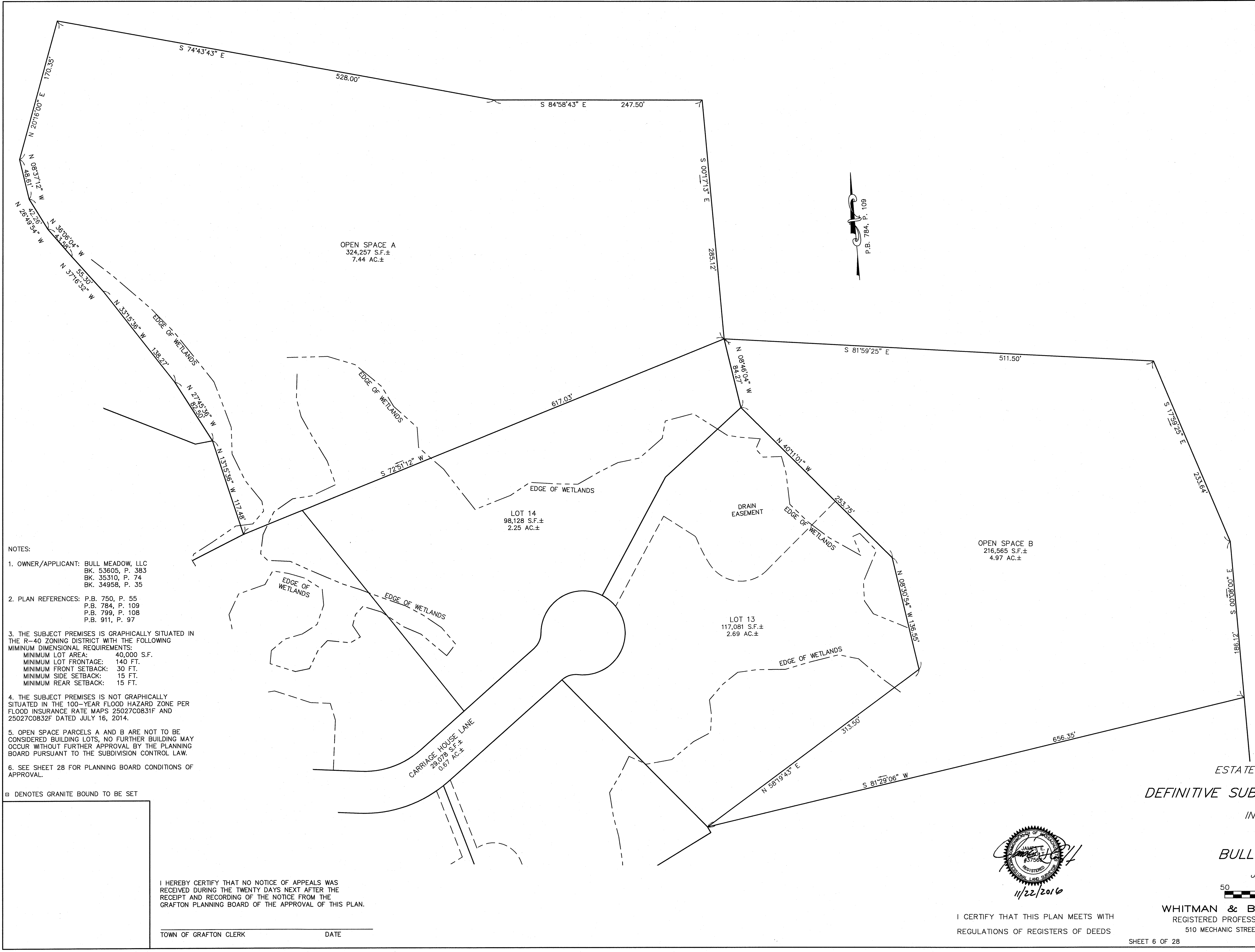
SHEET 5 OF 28

REVISED 10-11-16
REVISED 11-22-16

31-D-39



APPROVED BY THE GRAFTON
PLANNING BOARD DATE: _____

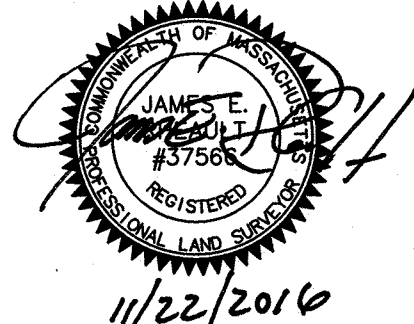


- NOTES:
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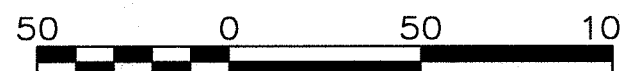
ESTATES AT BULL MEADOW
DEFINITIVE SUBDIVISION PLAN OF LAND

IN GRAFTON, MA

PREPARED FOR

BULL MEADOW, LLC

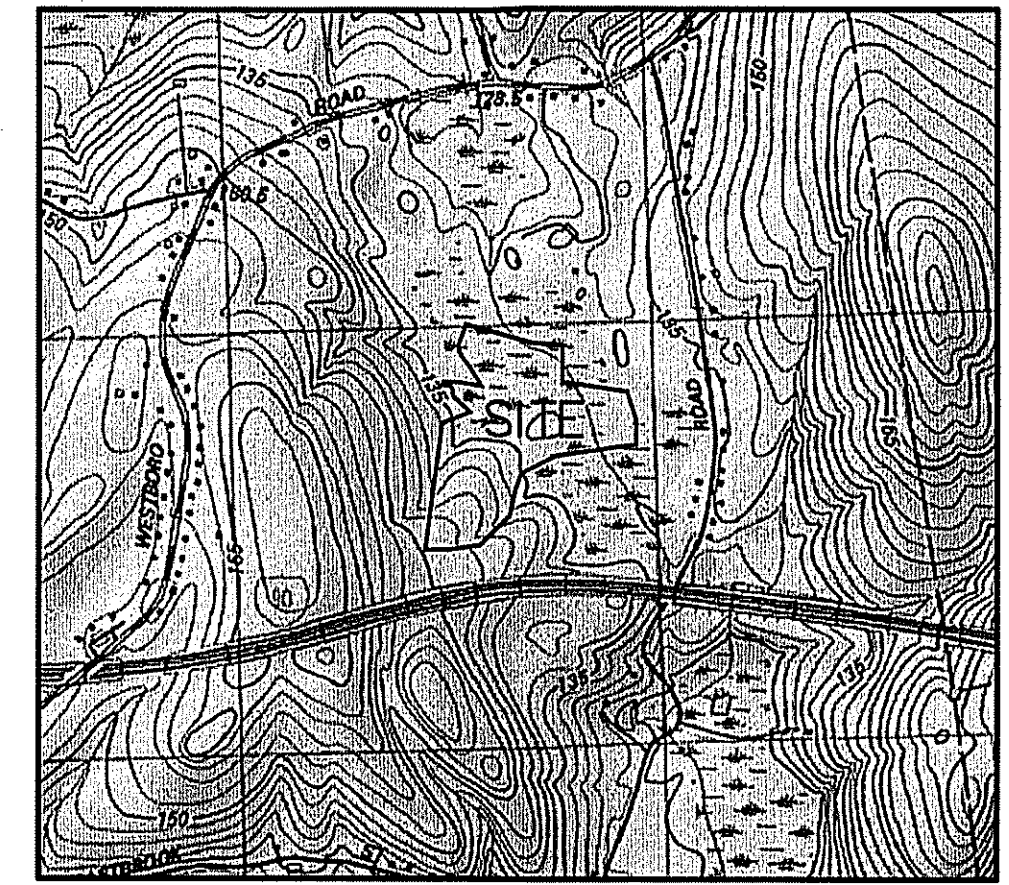
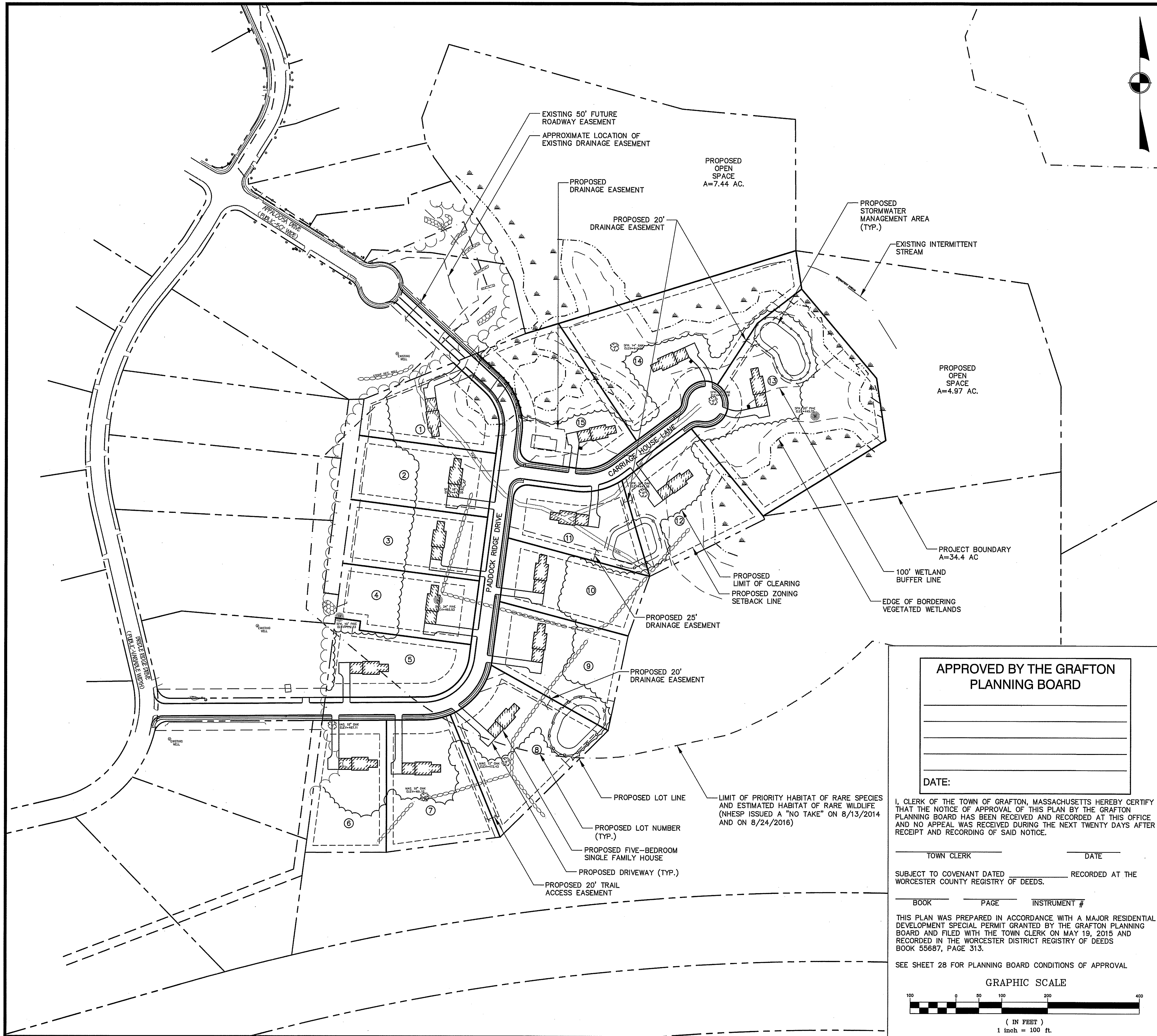
JUNE 10, 2016



REVISED 10-11-16
REVISED 11-22-16

WHITMAN & BINGHAM ASSOCIATES, LLC
REGISTERED PROFESSIONAL ENGINEERS & LAND SURVEYORS
510 MECHANIC STREET - LEOMINSTER, MASSACHUSETTS 01453

F:\CADD\ME066-Land\Definitive\Plan\066P-CSP01.dwg 11/22/2016 11:53 AM by: Justin Lachar



LOCUS PLAN

1"=1,500 FT.±

NOTES:

1. WETLAND DELINEATION SHOWN WAS COMPLETED BY ECOTEC, INC. ON NOVEMBER 13, 2013 AND WAS GPS LOCATED ON DECEMBER 12, 2013 BY WHITMAN & BINGHAM ASSOCIATES.
2. THE PROPOSED SUBDIVISION WILL BE SERVICED BY DOMESTIC WATER AND FIRE PROTECTION. A NEW DUCTILE IRON WATER SERVICE WILL BE EXTENDED FROM THE INTERSECTION OF OLD WESTBORO ROAD AND BRIDLE RIDGE DRIVE APPROXIMATELY 2,500 LF TO THE END OF THE CUL-DE-SAC ON APPALOOSA DRIVE.

LEGEND:

- ① PROPOSED LOT NUMBER

ZONING SUMMARY:

DISTRICT:	R40		
DIMENSIONAL REQUIREMENTS:		PROVIDED	CONFORMANCE
MIN. LOT WIDTH:	140 FT	140 FT	YES
	90 FT ON CDS	90 FT	YES
FRONT SETBACK:	30 FT	30 FT	YES
REAR SETBACK:	15 FT	15 FT	YES
SIDE SETBACK:	15 FT	15 FT	YES
MAX. HEIGHT:	35 FT	35 FT	YES
FRONTAGE:	140 FT	140 FT	YES
LOT AREA:	40,000 SF	40,000 SF+	YES
MAX. COVERAGE:	30%	<30%	YES

DESIGN FEATURES:

LENGTH OF ROADWAY:	2,125 FT.
ROAD A	1,660 FT.
ROAD B	465 FT.
NUMBER OF LOTS:	15
ON-SITE SEPTIC SYSTEMS:	YES
TOWN WATER:	YES

RECORD OWNERS:

BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505
PARCEL ID: 110/31.0-0000-0123.0
BOOK 34958, PAGE 35

BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505
PARCEL ID: 110/32.0-0000-0005.A
BOOK 35310, PAGE 74

MassDOT
10 PARK PLAZA
BOSTON, MA 02116
PARCEL ID: 110/31.0-0000-0100.0
BOOK 3919, PAGE 318

MassDOT
10 PARK PLAZA
BOSTON, MA 02116
PARCEL ID: 110/32.0-0000-0100.0
BOOK N/A, PAGE N/A

TOWN OF GRAFTON
30 PROVIDENCE ROAD
GRAFTON, MA 01519
PARCEL ID: 110/31.0-0000-0214.B
BOOK 46659, PAGE 180

APPROVED BY THE GRAFTON PLANNING BOARD

DATE:

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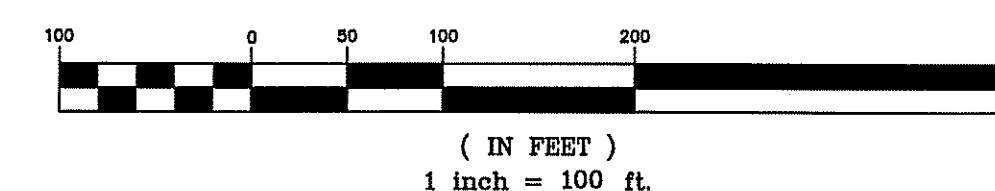
SUBJECT TO COVENANT DATED _____ RECORDED AT THE WORCESTER COUNTY REGISTRY OF DEEDS.

BOOK _____ PAGE _____ INSTRUMENT # _____

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SEE SHEET 28 FOR PLANNING BOARD CONDITIONS OF APPROVAL

GRAPHIC SCALE



NOT FOR CONSTRUCTION

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PREPARED FOR:
BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

No.	Date	Revision
2	11/22/2016	TOWN COMMENTS
1	10/11/2016	TOWN COMMENTS



11/22/16

Drawn By: BRM Designed By: BRM Checked By: ZSCM

McCarty Engineering, Inc. Civil Engineers

42 Jungle Road, Leominster, MA 01453
phone: (978) 534-1318 fax: (978) 840-6907
www.mccartydyb.com

Project Name

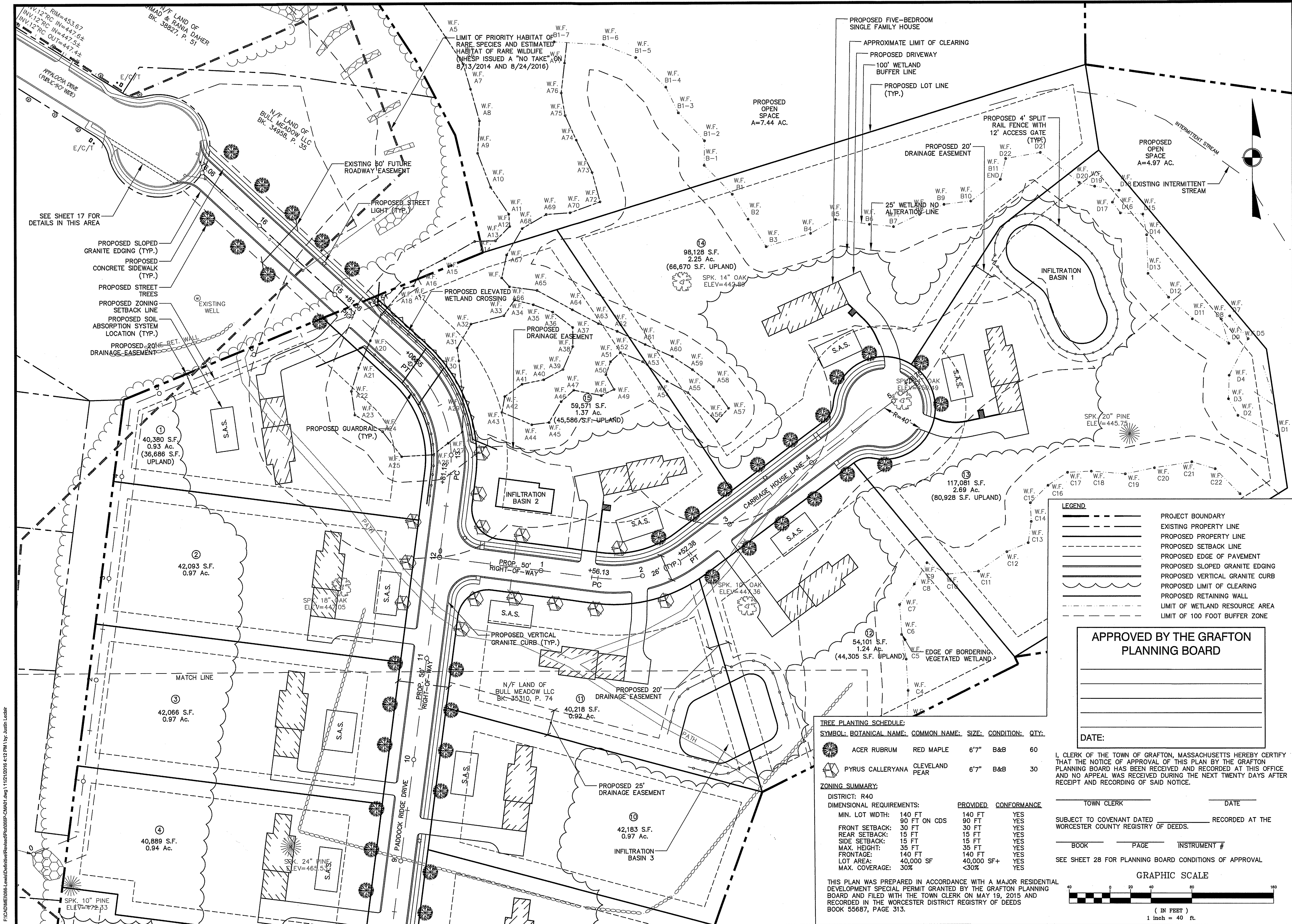
Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536

Sheet Title

Overall Conventional
Subdivision Plan
(1 of 3)

Job No: 066
File Name: 066P-CSP01
Date: June 10, 2016
Scale: 1"=100'

Sheet No.
7
OF 28



NOT FOR CONSTRUCTION
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PREPARED FOR:
BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

2	11/22/2016	TOWN COMMENTS
1	10/11/2016	TOWN COMMENTS
No.	Date	Revision





7/3/16 11/22/16

Drawn By: BRM
Designed By: BRM
Checked By: 7/3/16

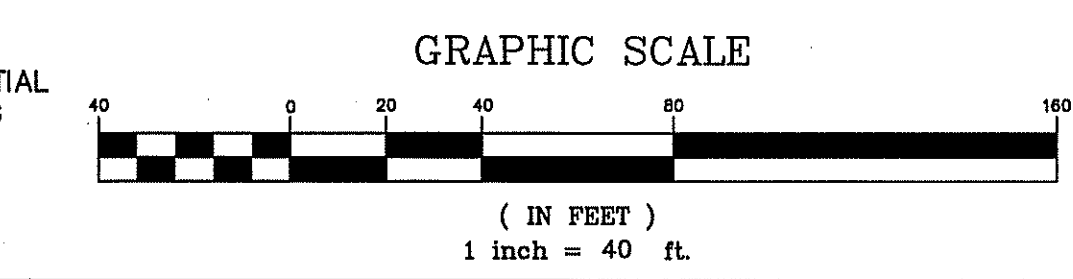
LEGEND	
---	PROJECT BOUNDARY
---	EXISTING PROPERTY LINE
---	PROPOSED PROPERTY LINE
---	PROPOSED SETBACK LINE
---	PROPOSED EDGE OF PAVEMENT
---	PROPOSED SLOPED GRANITE EDGING
---	PROPOSED VERTICAL GRANITE CURB
---	PROPOSED LIMIT OF CLEARING
---	PROPOSED RETAINING WALL
---	LIMIT OF WETLAND RESOURCE AREA
---	LIMIT OF 100 FOOT BUFFER ZONE

APPROVED BY THE GRAFTON
PLANNING BOARD

DATE:

TREE PLANTING SCHEDULE:					
SYMBOL:	BOTANICAL NAME:	COMMON NAME:	SIZE:	CONDITION:	QTY:
	ACER RUBRUM	RED MAPLE	6"7"	B&B	60
	PYRUS CALLERYANA	CLEVELAND PEAR	6"7"	B&B	30
ZONING SUMMARY:					
DISTRICT: R40					
DIMENSIONAL REQUIREMENTS:			<u>PROVIDED</u>	<u>CONFORMANCE</u>	
MIN. LOT WIDTH:	140 FT		140 FT	YES	
FRONT SETBACK:	90 FT ON CDS		90 FT	YES	
REAR SETBACK:	15 FT		15 FT	YES	
SIDE SETBACK:	15 FT		15 FT	YES	
MAX. HEIGHT:	35 FT		35 FT	YES	
FRONTAGE:	140 FT		140 FT	YES	
LOT AREA:	40,000 SF		40,000 SF+	YES	
MAX. COVERAGE:	30%		<30%	YES	

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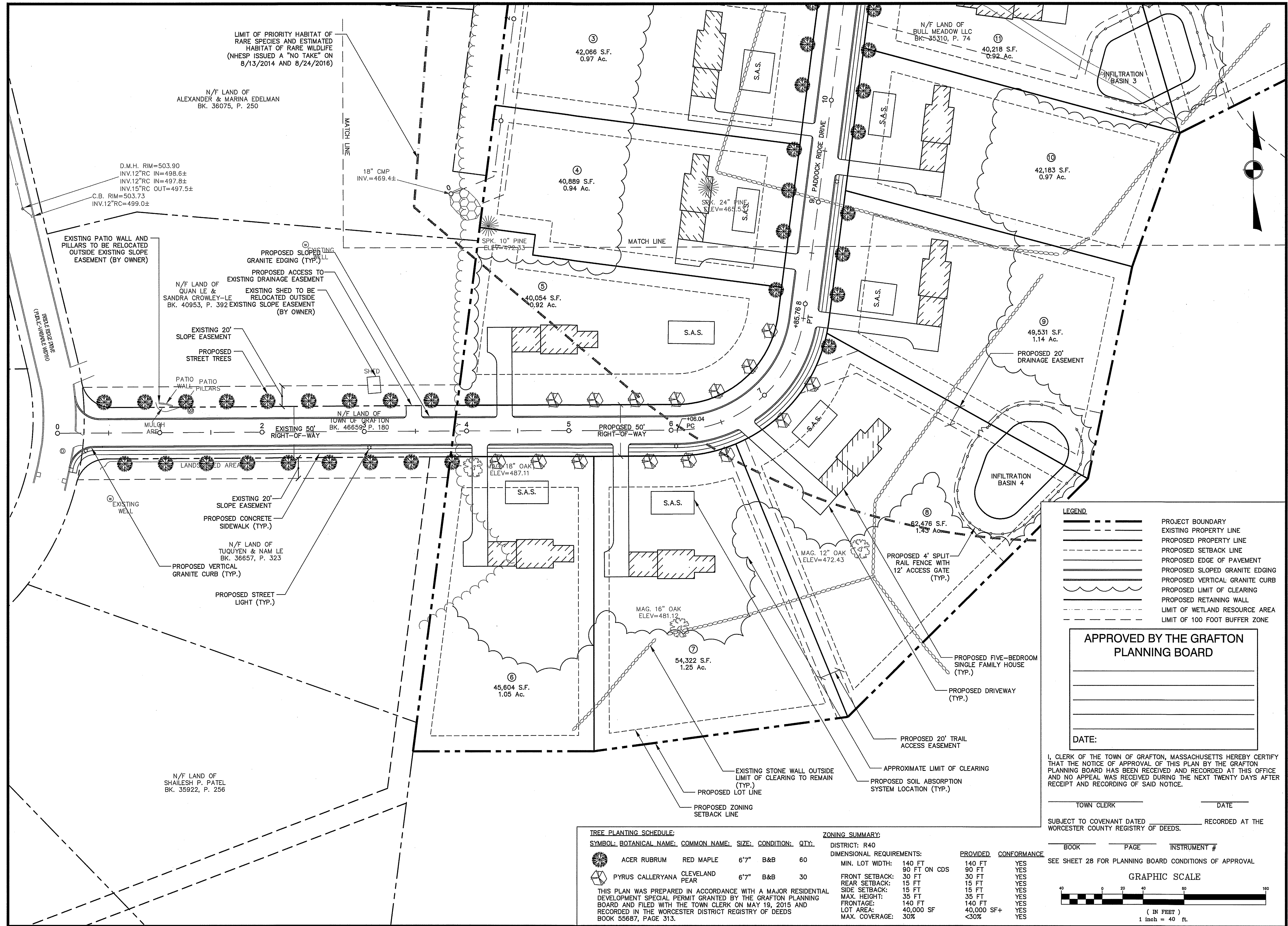
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Project Name
Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536

Sheet Title
Layout and Materials
Plan
(2 of 3)

Job No: 066
File Name: 066P-CMA01
Date: June 10, 2016
Scale: 1"=40'
Sheet No.
8
OF 28

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PREPARED FOR:
BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

No.	Date	Revision
2	11/22/2016	TOWN COMMENTS
1	10/11/2016	TOWN COMMENTS



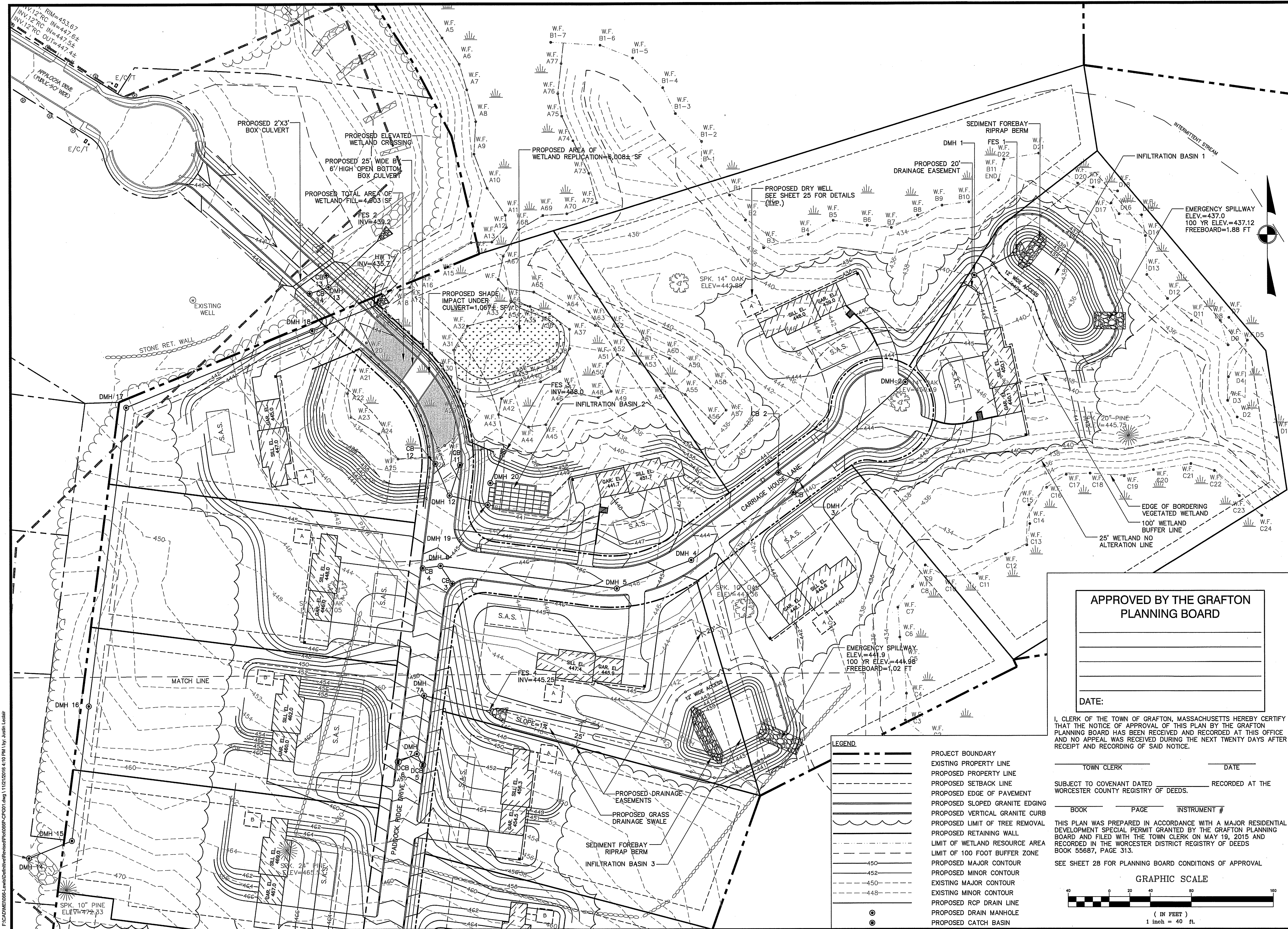
Drawn By: BRM
Designed By: BRM
Checked By: *BRM* 11/22/16

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9
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BOYLSTON, MA 01505

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Designed By: BRM
Checked By: JSC

APPROVED BY THE GRAFTON PLANNING BOARD

DATE:

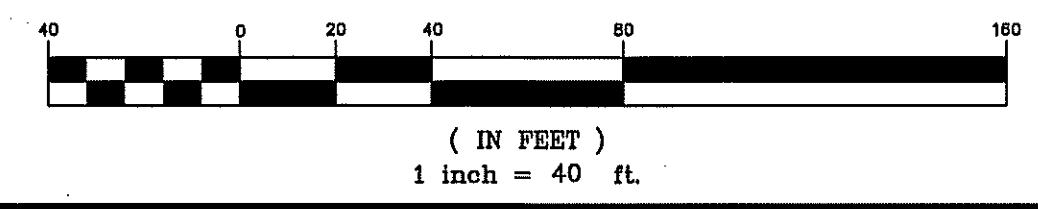
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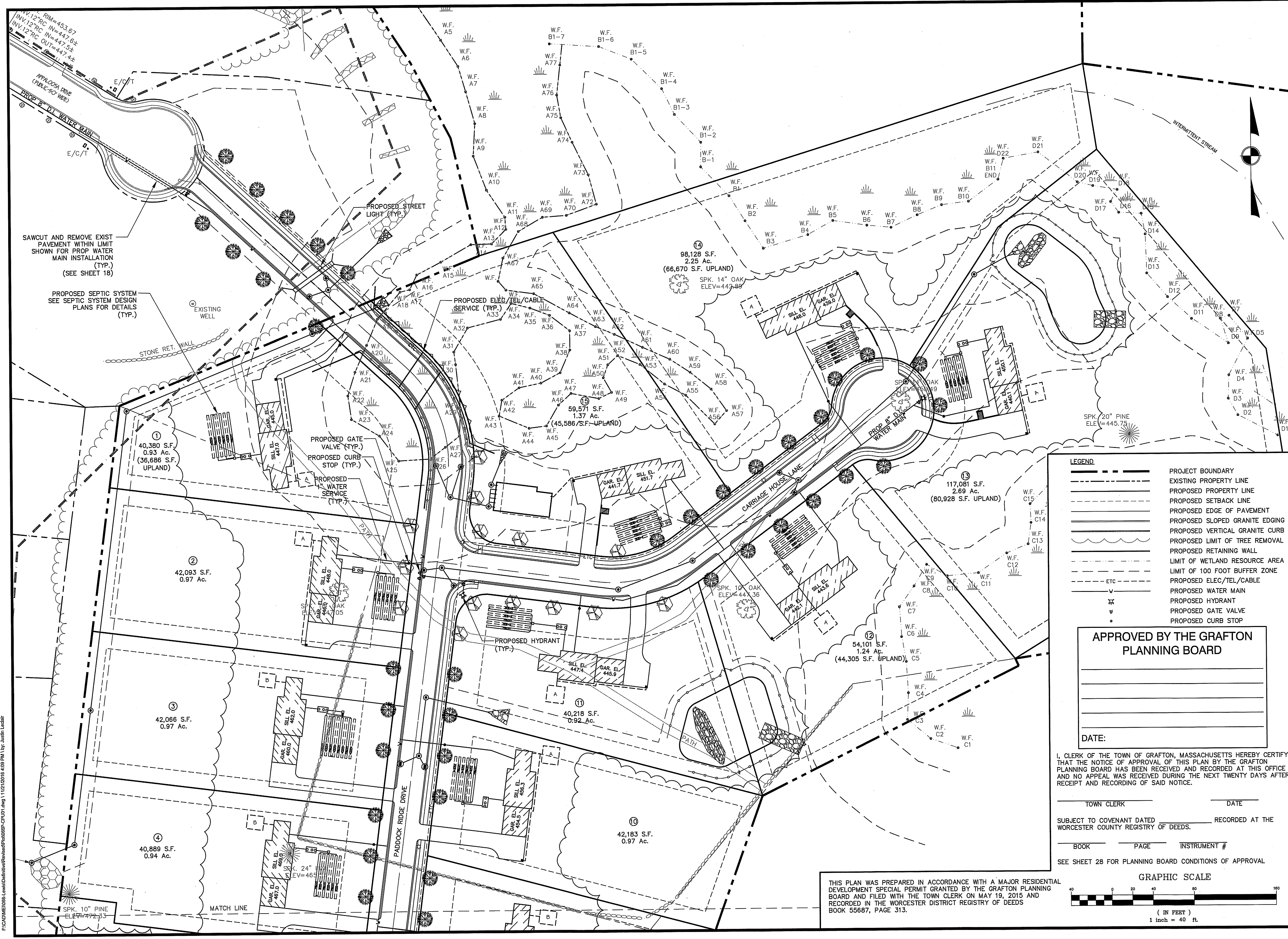
SEE SHEET 28 FOR PLANNING BOARD CONDITIONS OF APPROVAL

GRAPHIC SCALE



- LEGEND
- PROJECT BOUNDARY
 - EXISTING PROPERTY LINE
 - PROPOSED PROPERTY LINE
 - PROPOSED SETBACK LINE
 - PROPOSED EDGE OF PAVEMENT
 - PROPOSED SLOPED GRANITE EDGING
 - PROPOSED VERTICAL GRANITE CURB
 - PROPOSED LIMIT OF TREE REMOVAL
 - PROPOSED RETAINING WALL
 - LIMIT OF WETLAND RESOURCE AREA
 - LIMIT OF 100 FOOT BUFFER ZONE
 - PROPOSED MAJOR CONTOUR
 - PROPOSED MINOR CONTOUR
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - PROPOSED RCP DRAIN LINE
 - PROPOSED DRAIN MANHOLE
 - PROPOSED CATCH BASIN

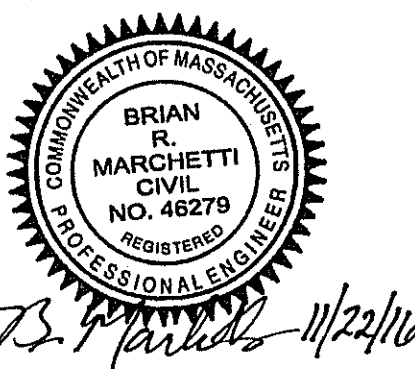
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2 RACHEL ROAD
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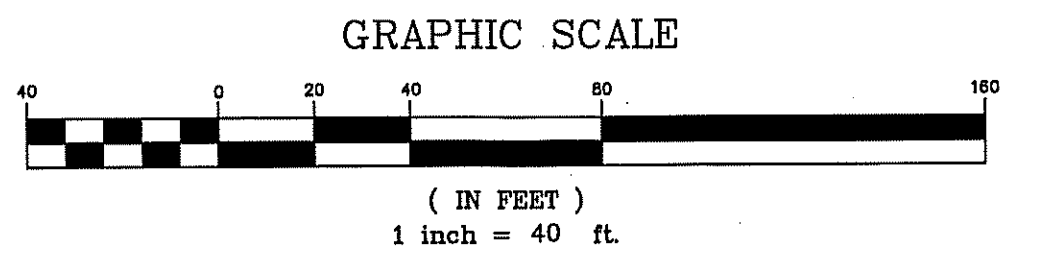
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 - LIMIT OF 100 FOOT BUFFER ZONE
 - PROPOSED ELEC./TEL./CABLE
 - PROPOSED WATER MAIN
 - PROPOSED HYDRANT
 - PROPOSED GATE VALVE
 - PROPOSED CURB STOP

APPROVED BY THE GRAFTON PLANNING BOARD

DATE:

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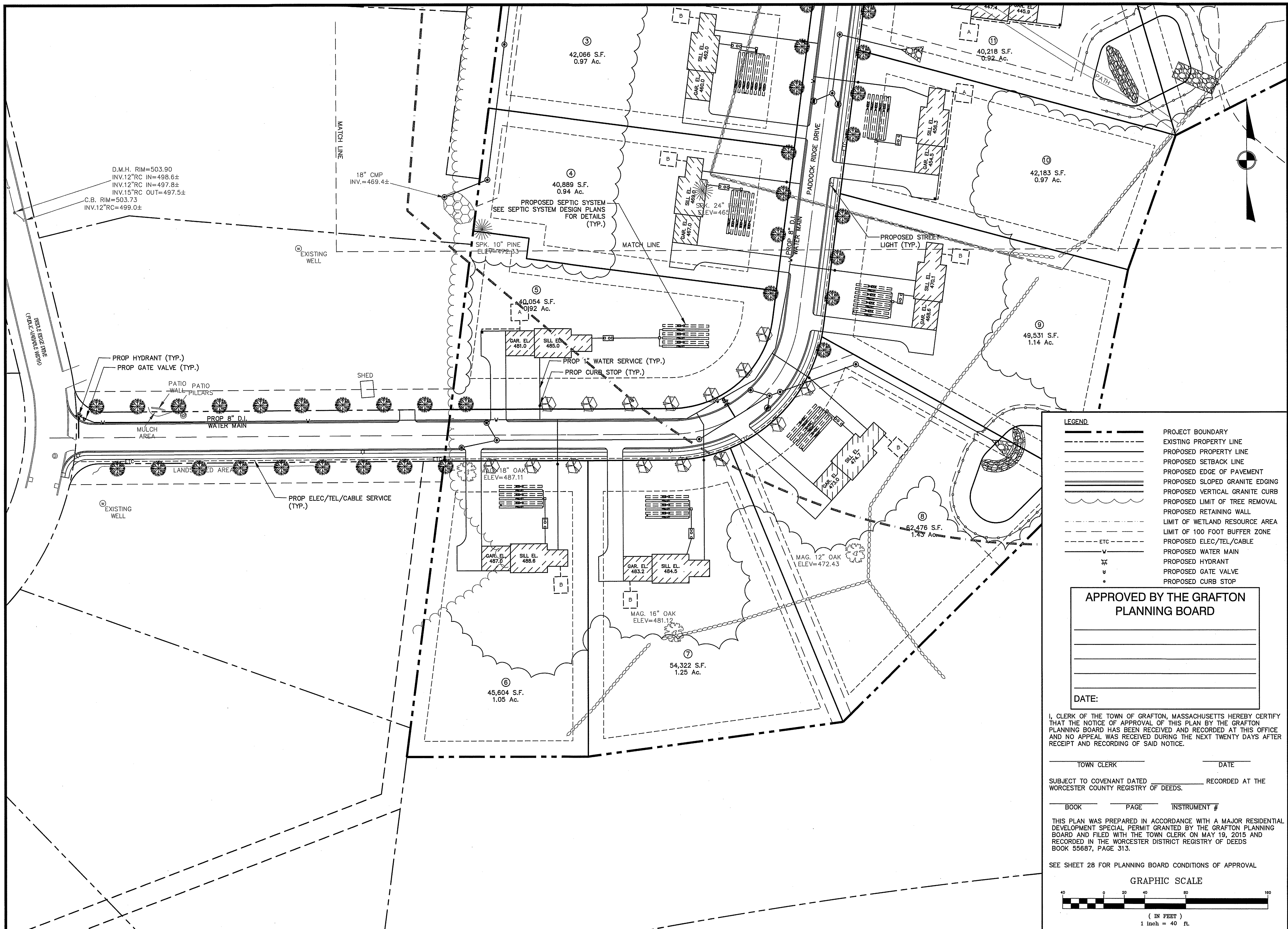
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Project Name
**Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536**

Sheet Title
**Utility Plan
(1 of 2)**

Job No: 066 Sheet No:
File Name: 066P-CPU01 **12**
Date: June 10, 2016
Scale: 1"=40' OF 28

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PREPARED FOR:
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2 RACHEL ROAD
BOYLSTON, MA 01505

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1	10/11/2016	TOWN COMMENTS
No.	Date	Revision



B. Mark 11/22/16

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Project Name
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Definitive Plan
N. Grafton, MA 01536

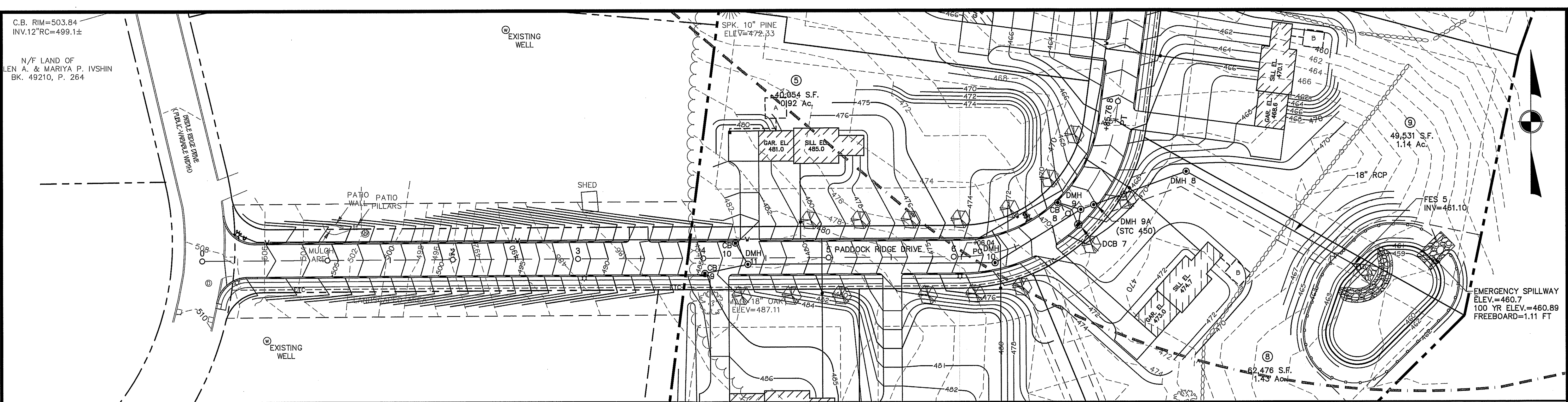
Sheet Title
Utility Plan
(2 of 2)

Job No: 066
File Name: 066P-CPU02
Date: June 10, 2016
Scale: 1"=40'

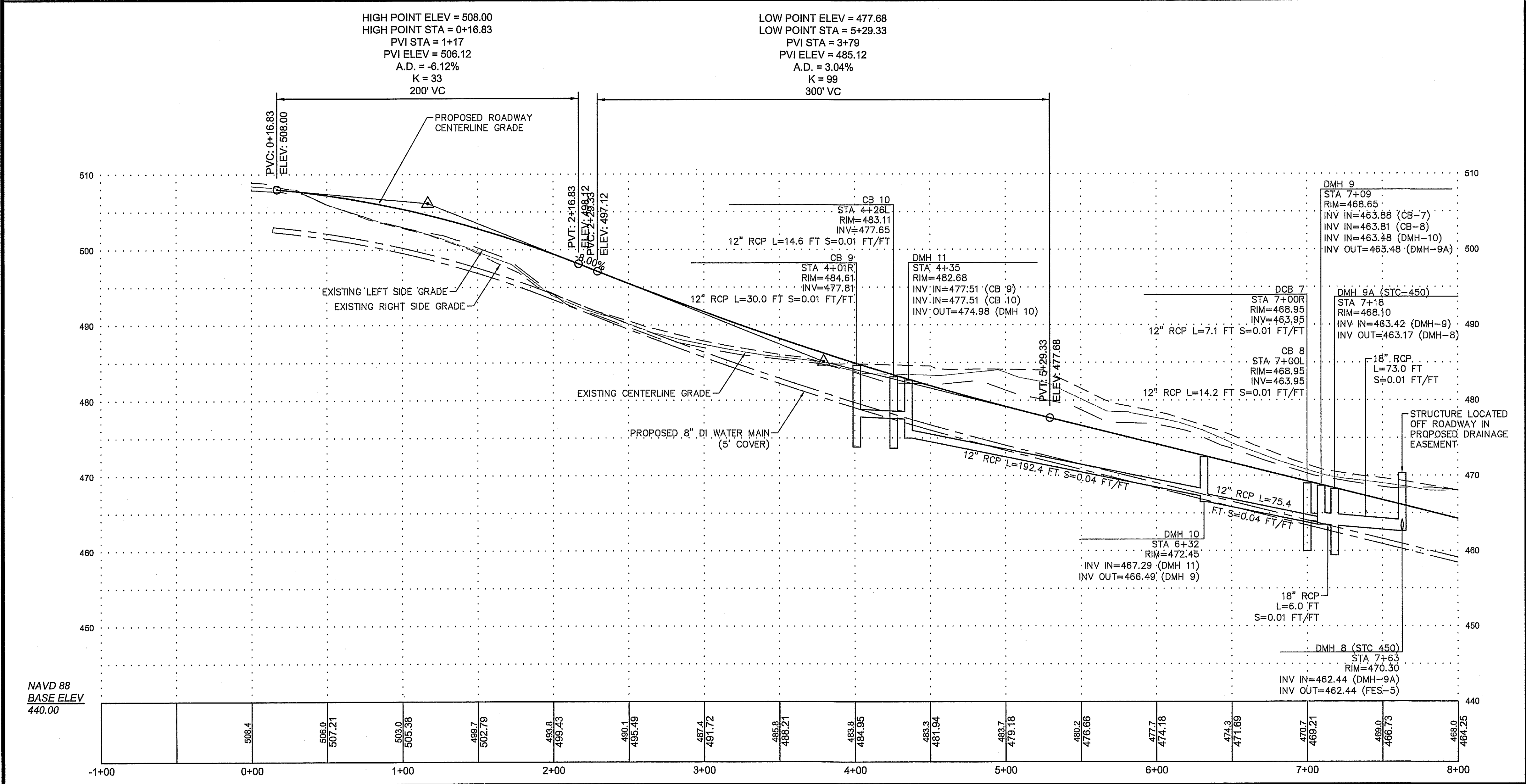
Sheet No.
13
OF 28

C.B. RIM=503.84
INV.12"RC=499.1±

N/F LAND OF
LEN A. & MARIYA P. IVSHIN
BK. 49210, P. 264



PADDOCK RIDGE DRIVE PLAN
SCALE: 1"=40'



PADDOCK RIDGE DRIVE PROFILE
VERT. SCALE: 1"=8'
HOR. SCALE: 1"=40'

APPROVED BY THE GRAFTON
PLANNING BOARD

DATE:

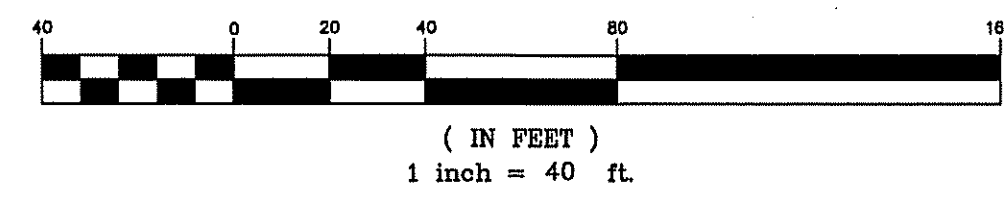
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GRAPHIC SCALE



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PREPARED FOR:
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2 RACHEL ROAD
BOYLSTON, MA 01505

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Checked By: *7.9/16*

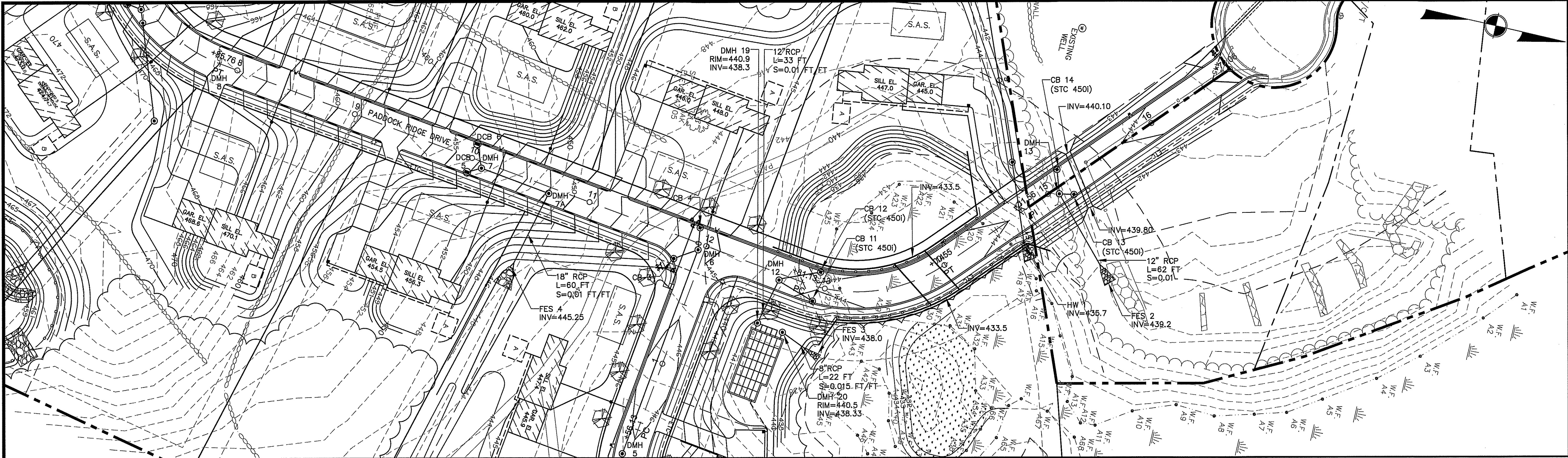
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Definitive Plan
N. Grafton, MA 01536

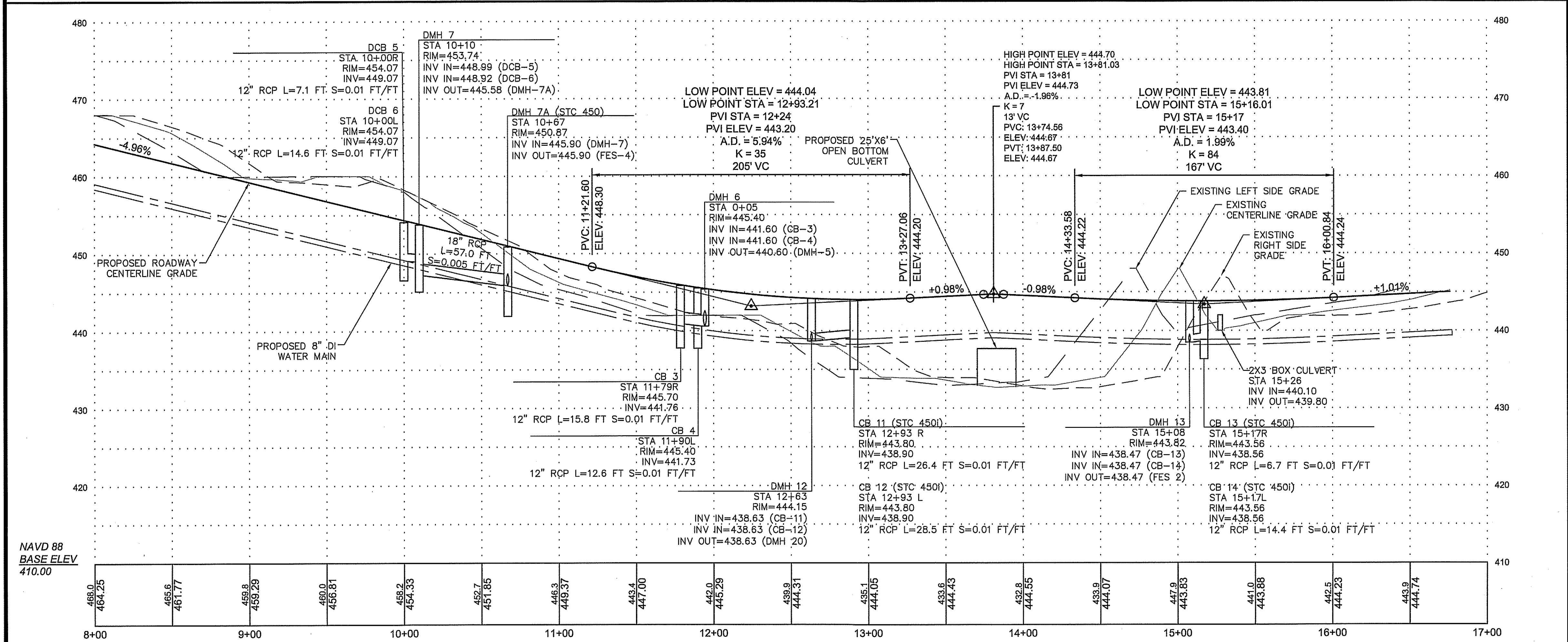
Sheet Title
Roadway and
Utility Profile
(1 of 4)

Job No: 066
File Name: 066P-CPF01
Date: June 10, 2016
Scale: 1"=40'

Sheet No.
14
OF 28



PADDOCK RIDGE DRIVE PLAN
SCALE: 1"=40'



PADDOCK RIDGE DRIVE PROFILE
VERT. SCALE: 1"=8'
HOR. SCALE: 1"=40'

GENERAL NOTES:
1. THE 12" RCP PIPE BETWEEN CB 11, CB 12 AND DMH 20 SHALL BE CLASS V RCP.

APPROVED BY THE GRAFTON
PLANNING BOARD

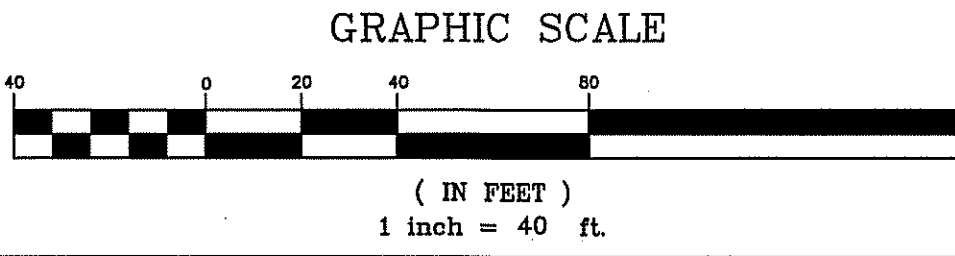
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BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

2	11/22/2016	TOWN COMMENTS
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No.	Date	Revision



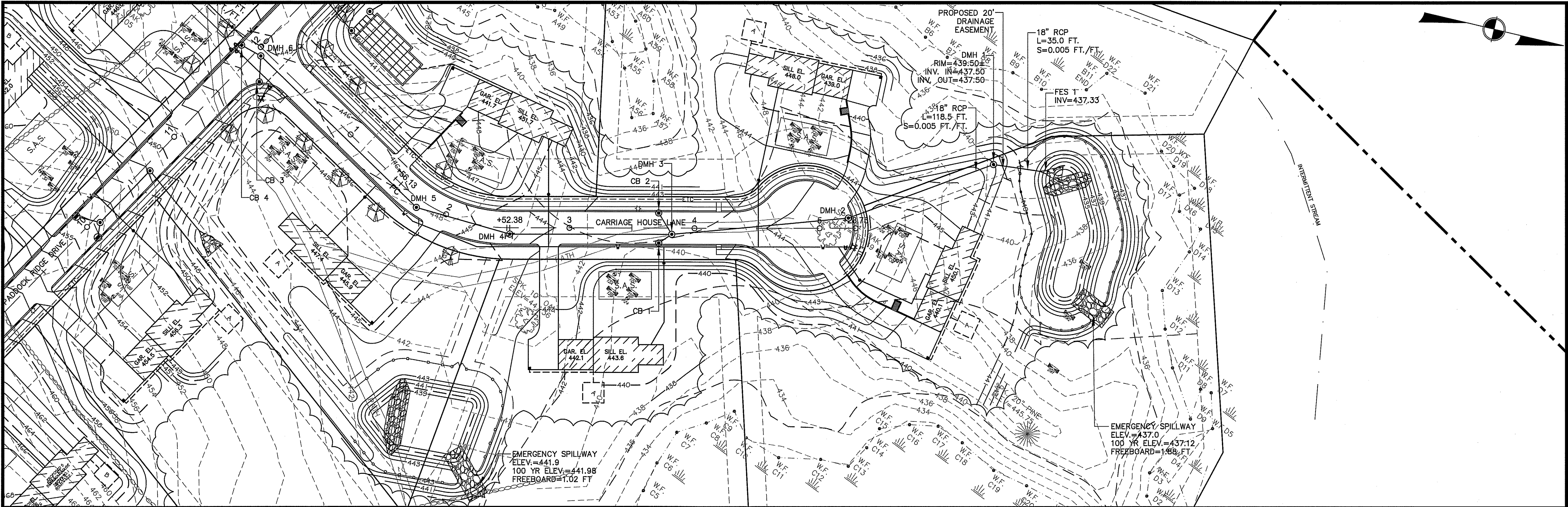
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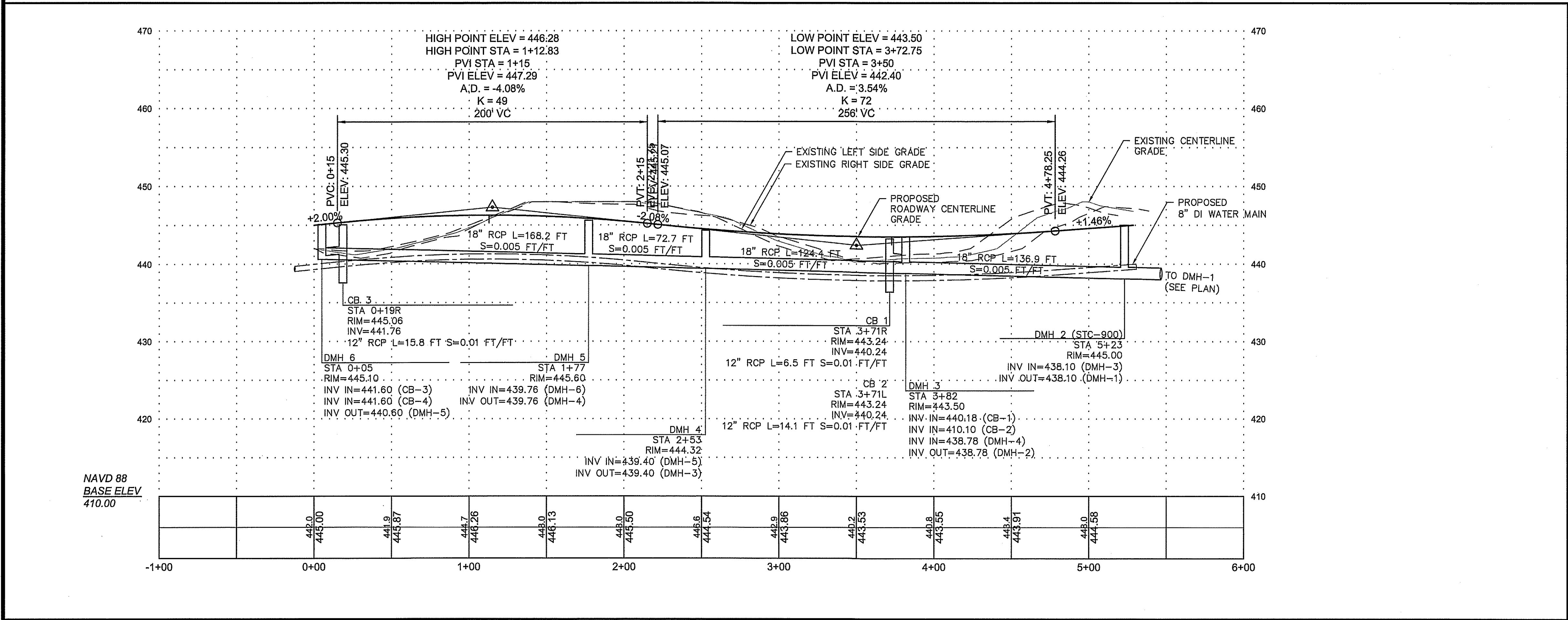
Project Name
Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536

Sheet Title
Roadway and
Utility Profile
(2 of 4)

Job No: 066
File Name: 066P-CPF02
Date: June 10, 2016
Scale: 1"=40'
Sheet No.
15
OF 28



CARRIAGE HOUSE LANE PLAN
SCALE: 1"=40'



CARRIAGE HOUSE LANE PROFILE
VERT. SCALE: 1"=8'
HOR. SCALE: 1"=40'

GENERAL NOTES:
1. THE 24" RCP PIPE BETWEEN DMH 6 AND INFILTRATION BASIN 1 SHALL BE CLASS V RCP.

APPROVED BY THE GRAFTON
PLANNING BOARD

DATE:

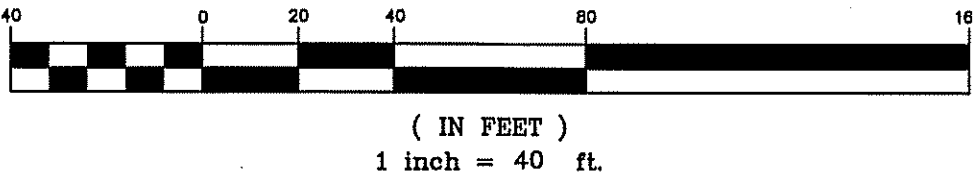
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GRAPHIC SCALE



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2 RACHEL ROAD
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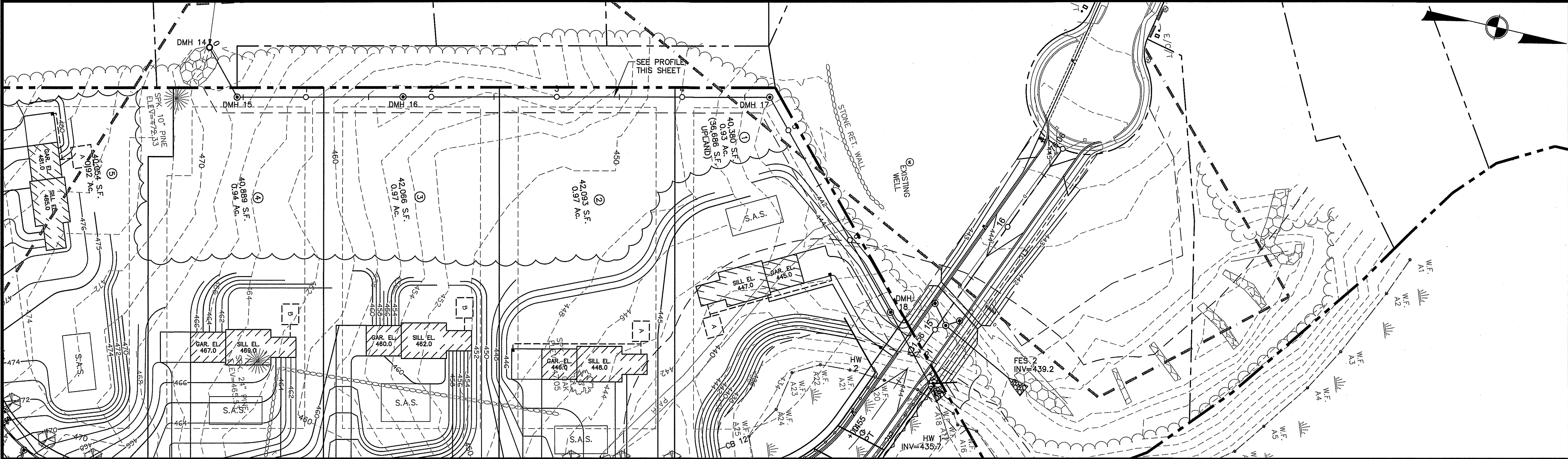
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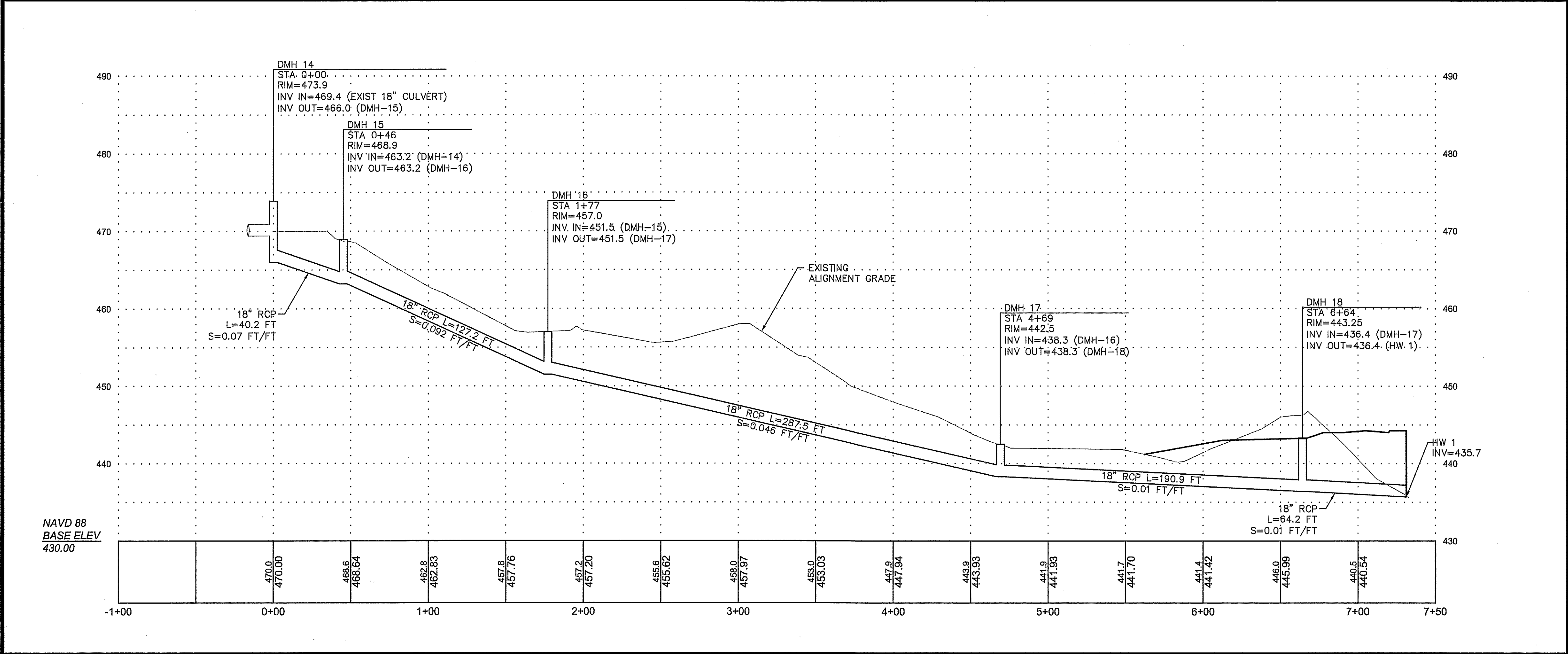
Project Name
Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536

Sheet Title
Roadway and
Utility Profile
(3 of 4)

Job No: 066
File Name: 066P-CPF03
Date: June 10, 2016
Scale: 1"=40'
Sheet No.
16
OF 28



CROSS COUNTRY DRAIN PLAN
SCALE: 1"=40'



CROSS COUNTRY DRAIN PROFILE
VERT. SCALE: 1"=8'
HOR. SCALE: 1"=40'

APPROVED BY THE GRAFTON
PLANNING BOARD

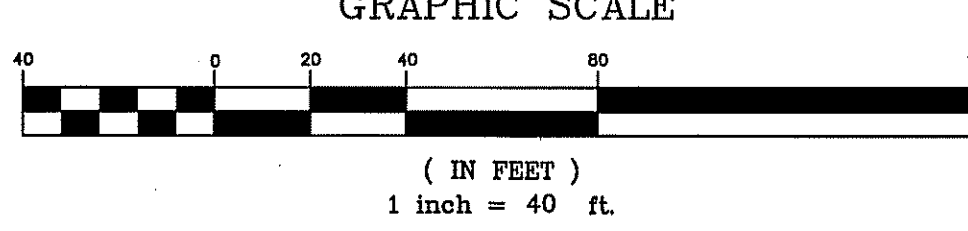
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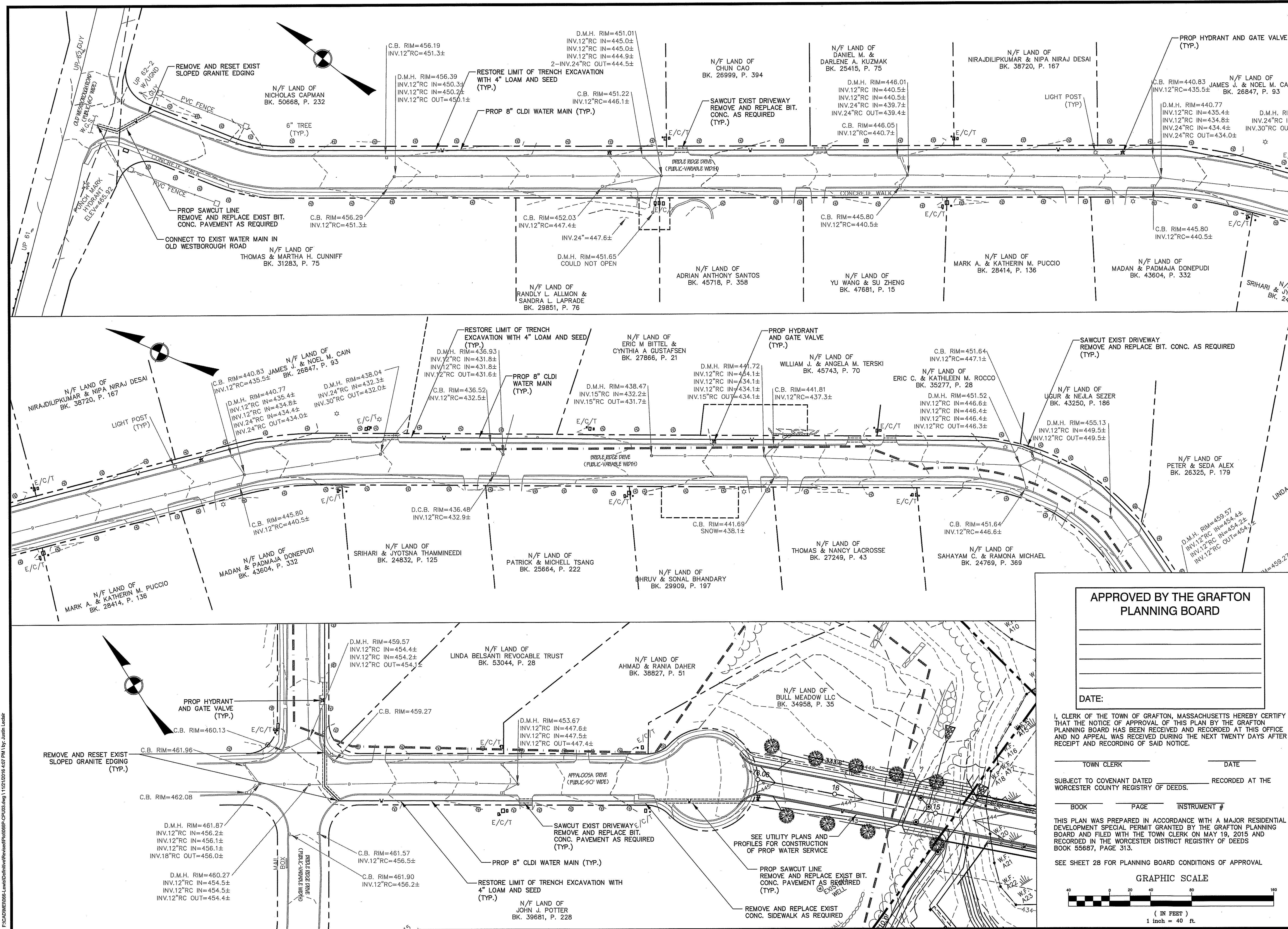
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N. Grafton, MA 01536

Sheet Title
Roadway and
Utility Profile
(4 of 4)

Job No: 066
File Name: 066P-CPFD4
Date: June 10, 2016
Scale: 1"=40'

Sheet No.
17
OF 28

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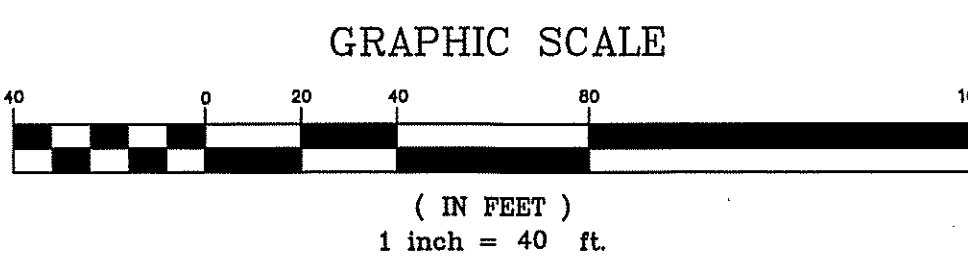
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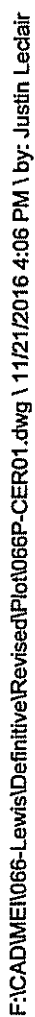
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Project Name
Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536

Sheet Title
Water Main
Extension
Plan

Job No: 066
File Name: 066P-CPU03
Date: June 10, 2016
Scale: 1"=120'
Sheet No.
18
OF 28

F:\CADD\ME066-Lewis\Definitive\Revised\Plan\066P-CPU03.dwg 11/21/2016 4:07 PM by: Justin Lachar



11. TEMPORARY SEDIMENT TRAPPING DEVICES MUST NOT BE REMOVED UNTIL PERMANENT STABILIZATION IS ESTABLISHED IN ALL CONSTRUCTION AREAS ASSOCIATED WITH THE PROJECT. SIMILARLY, STABILIZATION MUST BE ESTABLISHED PRIOR TO CONVERTING TEMPORARY SEDIMENT TRAP/BASINS INTO PERMANENT POST-CONSTRUCTION STORMWATER MANAGEMENT FACILITIES. ALL FACILITIES USED FOR TEMPORARY SEDIMENT TRAPPING, CLEANED AND RESTABILIZED PRIOR TO BEING PUT INTO FINAL OPERATION.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF REMOVAL OF THE TEMPORARY MEASURES.
13. THE CONTRACTOR SHALL REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEANUP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. ALL DEMOLITION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE SITE TO A LEGAL DUMP SITE. ALL TRUCKS LEAVING THE SITE SHALL BE COVERED.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTRACTOR TO INSTITUTE EROSION CONTROL MEASURES ON AN AS NECESSARY BASIS, SUCH THAT EXCESS SOIL EROSION DOES NOT OCCUR. MEASURES SHALL INCLUDE SILT SACKS AND SILT SOCKS AROUND DRAINAGE INLETS, MULCHING AND PLANTING OF DISTURBED AREAS.
15. ALL STORM DRAINAGE INLETS TO PREVENT SEDIMENT SHALL BE INSTALLED AROUND THE INLET TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM.
16. AT THE END OF CONSTRUCTION ALL DRAINAGE STRUCTURES ARE TO BE CLEANED OF SILT, STONES AND OTHER DEBRIS.
17. DURING CONSTRUCTION THE EROSION CONTROL MEASURES SHALL BE MAINTAINED AND ADJUSTED AS NECESSARY PRIOR TO ANY PREDICTED STORM EVENT. THE EROSION CONTROL MEASURE SHALL BE CLEANED REGULARLY AND ADJUSTED IF NECESSARY TO ENSURE THAT NO SILT OR DEBRIS LEAVES THE SITE.

THESE PLANS WERE PREPARED FOR THE PURPOSE OF OBTAINING STATE AND LOCAL PERMITS AND ARE NOT INTENDED TO BE USED AS CONSTRUCTION DOCUMENTS.

PREPARED FOR:
BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

2	11/22/2016	TOWN COMMENTS
1	10/11/2016	TOWN COMMENTS
No.	Date	Revision



Drawn By: BRM Designed By: BRM Checked By: TSRM

APPROVED BY THE GRAFTON
PLANNING BOARD

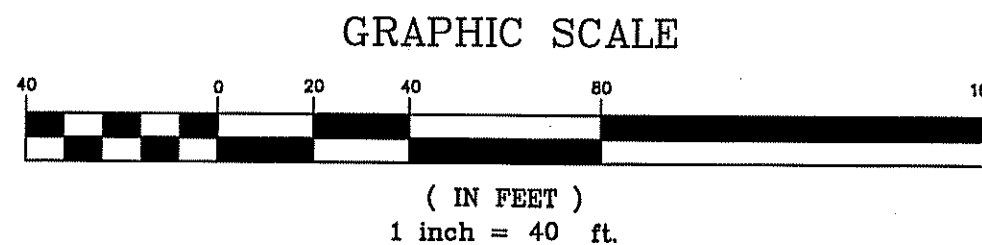
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BOOK 55687, PAGE 313.

SEE SHEET 28 FOR PLANNING BOARD CONDITIONS OF APPROVAL



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Project Name

**Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536**

Sheet Title
Erosion Control
Plan
(1 of 2)

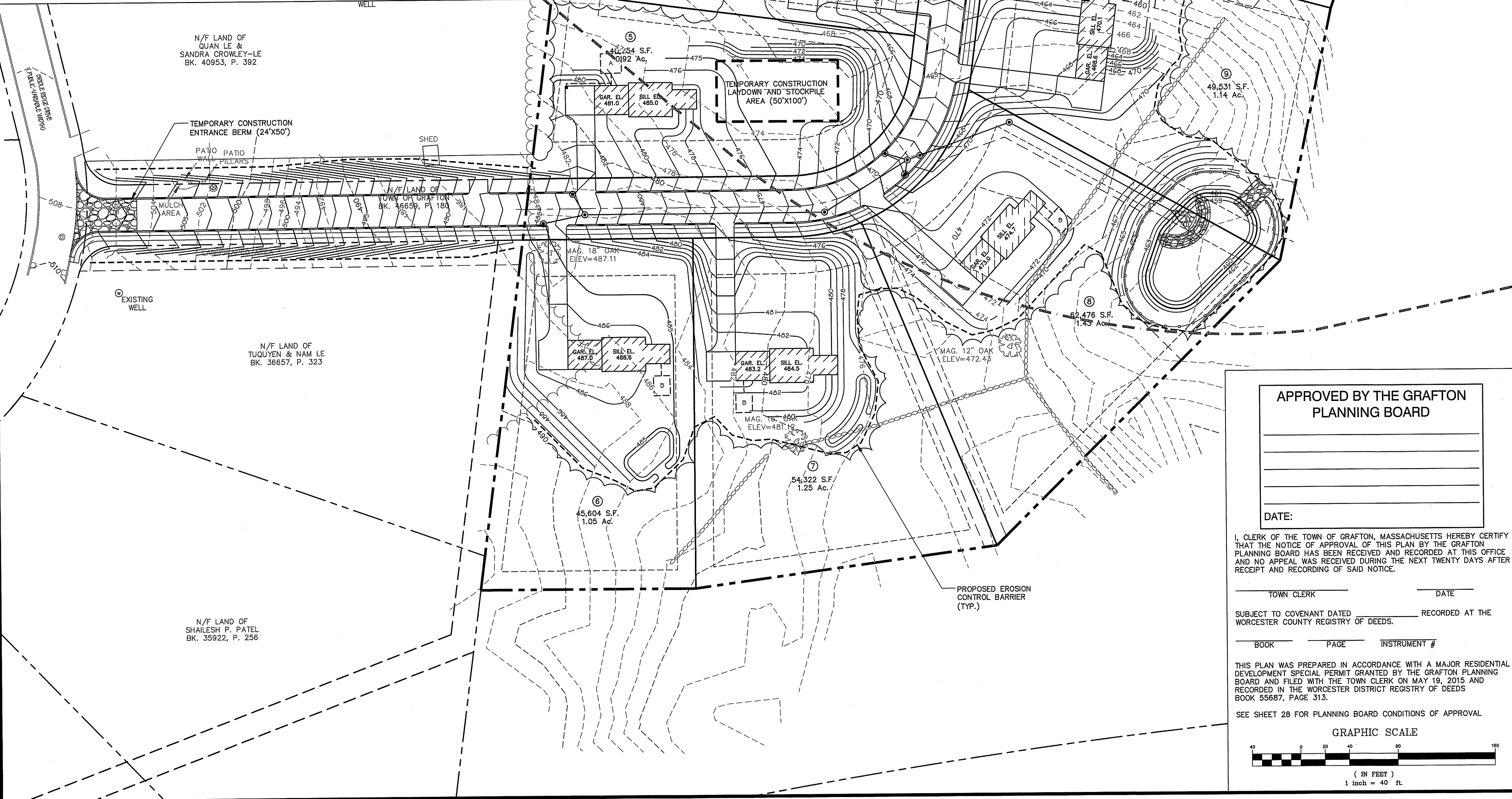
Job No: 066
File Name: 066P-CER01
Date: June 10, 2016
Scale: 1"=40'

Sheet No. **19**
OF 28

CONSTRUCTION EROSION & SEDIMENTATION NOTES:

1. REFERENCE STORM WATER POLLUTION PREVENTION PLAN FOR CONSTRUCTION SEQUENCING/PHASING.
2. PRIOR TO ANY LAND DISTURBANCE ACTIVITIES COMMENCING ON THE SITE, THE APPLICANT/CONTRACTOR SHALL BE RESPONSIBLE FOR PHYSICALLY MARKING THE LIMITS OF CONSTRUCTION.
3. PERIMETER SEDIMENTATION AND SILTATION CONTROL SYSTEMS SHALL BE INSTALLED PRIOR TO SOIL DISTURBANCE. THESE SYSTEMS TO BE INSPECTED AND MAINTAINED ON A PERIODIC BASIS TO CONTROL SOILS ON SITE.
4. AREAS OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST NOT BE DISTURBED UNLESS THE APPLICANT HAS OBTAINED PRIOR APPROVAL FROM THE TOWN OF GRAFTON.
5. TEMPORARY CONSTRUCTION BERMS SHALL BE CONSTRUCTED AT ALL ENTRANCES/EXIT POINTS OF THE SITE TO REDUCE THE AMOUNT OF SOILS CARRIED ONTO ROADWAYS AND OFF SITE.
6. DUST SHALL ALSO BE CONTROLLED AT THE SITE AT ALL TIMES.
7. MONITORING AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF SITE CONSTRUCTION SHALL BE REQUIRED ON A DAILY BASIS. SEDIMENT SHALL BE REMOVED ONCE THE VOLUME REACHES 1/4 TO 1/2 THE HEIGHT OF THE EROSION CONTROL DEVICE.
8. SOIL STOCKPILES MUST BE STABILIZED OR COVERED AT THE END OF EACH WORKDAY. STOCKPILE SIDE SLOPES SHALL NOT BE GREATER THAN 2:1. ALL STOCKPILES SHALL BE SURROUNDED BY A SEDIMENT CONTROL DEVICE.
9. DISTURBED AREA REMAINING IDLE FOR MORE THAN 14 DAYS SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED.
10. PERMANENT SEEDING SHALL BE UNDERTAKEN IN THE SPRING FROM MARCH THRU MAY, AND IN LATE SUMMER AND EARLY FALL FROM AUGUST THRU OCTOBER 15. DURING PEAK SUMMER MONTHS AND IN THE FALL AFTER OCTOBER 15 WHEN SEEDING IS FOUND TO BE IMPRACTICAL, AN APPROPRIATE TEMPORARY MULCH AND/OR NON-ASPHALTIC SOIL TACKIFIER WITH WINTER RYE SHALL BE APPLIED. PERMANENT SEEDING MAY BE UNDERTAKEN IN THE SUMMER IF PLANS PROVIDE FOR ADEQUATE MULCHING AND WATERING.

11. TEMPORARY SEDIMENT TRAPPING DEVICES MUST NOT BE REMOVED UNTIL PERMANENT STABILIZATION IS ESTABLISHED IN ALL CONSTRUCTION AREAS ASSOCIATED WITH THE PROJECT. SIMILARLY, STABILIZATION MUST BE ESTABLISHED PRIOR TO CONVERTING TEMPORARY SEDIMENT TRAPS/BASINS INTO PERMANENT (POST-CONSTRUCTION) STORMWATER MANAGEMENT FACILITIES. ALL FACILITIES USED FOR TEMPORARY MEASURES SHALL BE CLEANED AND RESTABILIZED PRIOR TO BEING PUT INTO FINAL OPERATION.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS OF REMOVAL OF THE TEMPORARY MEASURES.
13. THE CONTRACTOR SHALL REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEANUP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. ALL DEMOLITION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE SITE TO A LEGAL DUMP SITE. ALL TRUCKS LEAVING THE SITE SHALL BE COVERED.
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15. AFTER INSTALLATION OF EACH DRAINAGE INLET A SILT SACK SHALL BE INSTALLED AROUND THE INLET TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM.
16. AT THE END OF CONSTRUCTION ALL DRAINAGE STRUCTURES ARE TO BE CLEANED OF SILT, STONES AND OTHER DEBRIS.
17. DURING CONSTRUCTION THE EROSION CONTROL MEASURES SHALL BE INSPECTED AND CLEANED ONCE PER WEEK AND PRIOR TO ANY PREDICTED STORM EVENT. THE EROSION CONTROL MEASURE SHALL BE CLEANED REGULARLY AND ADJUSTED IF NECESSARY TO ENSURE THAT NO SILT OR DEBRIS LEAVES THE SITE.



APPROVED BY THE GRAFTON
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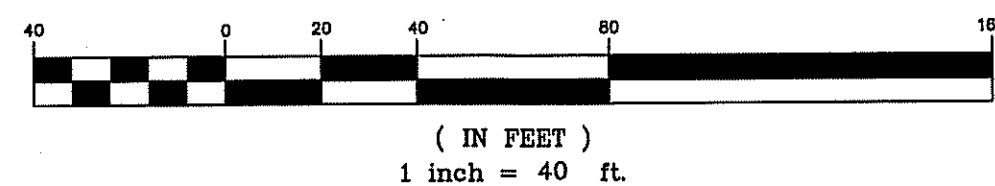
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GRAPHIC SCALE



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PREPARED FOR:
BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

No.	Date	Revision
2	11/22/2016	TOWN COMMENTS
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Drawn By: _____ Designed By: _____ Checked By: _____
BRM BRM BM

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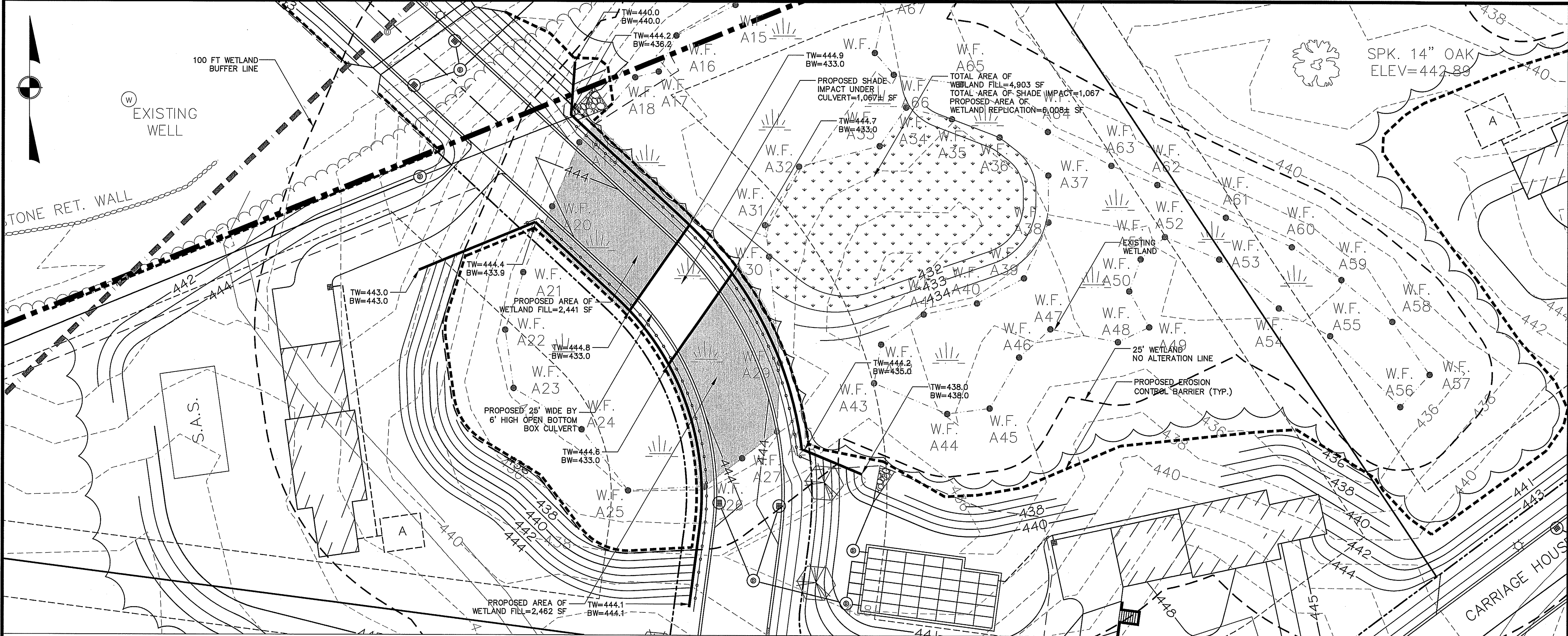
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Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536

Sheet Title

Erosion Control
Plan
(2 of 2)

Job No: 066
File Name: 066P-CER02
Date: June 10, 2016
Scale: 1"=40'
Sheet No.
20
OF 28



BORDERING VEGETATED WETLAND REPLICATION CONSTRUCTION PROTOCOL:

- THE FOLLOWING PROTOCOL CONFORMS TO THE GENERAL STANDARDS IN THE MA WETLANDS PROTECTION ACT REGULATIONS AT 310 CMR 10.55(4)(b)
- THE WETLAND BOUNDARIES (I.E., DOWNGRADE EDGES OF THE WETLAND REPLICATION AREA) WILL BE MARKED IN THE FIELD.
- PRIOR TO THE START OF EARTH-MOVING ACTIVITIES IN THE REPLICATION AREA, AN EROSION CONTROL BARRIER OF PROPERLY INSTALLED SILTATION FENCE (I.E., THE BOTTOM FEW INCHES OF THE SILTATION FENCE INSTALLED IN A NARROW, TRENCH AND THE TRENCH FILLED WITH SOIL AROUND THE SILTATION FENCE) WILL BE INSTALLED ALONG THE WETLAND BOUNDARIES BETWEEN THE WETLAND AND THE WETLAND REPLICATION AREA. THE WETLAND REPLICATION AREA WILL THEN BE CLAEARED AND GRUBBED, WITH THE EXCEPTION OF THE TREES THAT HAVE BEEN MARKED TO BE SAVED.
- THE PROPOSED FINAL GRADE OF THE REPLICATION AREA SHOULD APPROXIMATE THE ELEVATION OF THE ADJACENT WETLAND AREAS (432±), AS NOTED ON THE SITE PLANS. THE REPLICATION AREA WILL BE EXCAVATED TO A DEPTH OF 12 INCHES BELOW THE PROPOSED FINAL GRADE. THE EXCAVATION AND PLANTING WORK WILL BE CLOSELY SUPERVISED BY A QUALIFIED WETLAND SCIENTIST. MINOR MODIFICATIONS TO THE PROPOSED GRADING MAY BE MADE IN THE FILE BY THE WETLAND SCIENTIST IN RESPONSE TO OBSERVED SUBSURFACE HYDROLOGIC CONDITIONS. ALL EXCAVATED MATERIAL WILL BE DISPOSED OF AWAY FROM ALL WETLAND RESOURCE AREAS.
- EXISTING TOPSOIL WITHIN THE IMPACT AREA WILL BE EXCAVATED, STOCKPILED AND KEPT MOIST BY WATERING AND/OR COVERING OR IMMEDIATELY TRANSPORTED TO THE REPLICATION AREA.
- RELOCATED WETLAND TOPSOIL WILL BE SUPPLEMENTED WITH A 1:1 MIXTURE OF HIGH QUALITY, LOAMY TOPSOIL AND LEAF MOLD COMPOST, AS NECESSARY, TO APPROXIMATE 12 INCHES IN THICKNESS THROUGHOUT THE REPLICATION AREA. THE TOPSOIL SHALL HAVE A MINIMUM OF 9% ORGANIC MATTER. THE SUBSTRATE WILL BE ROUGHLY GRADED TO PROVIDE AN APPROPRIATE MICROTOPOGRAPHY. A MINIMUM OF 4 INCHES OF LOAMY TOPSOIL WILL BE APPLIED TO THE SIDE-SLOPES OF THE WETLAND REPLICATION AREA. THE SIDE SLOPES SHOULD BE STABILIZED AS NECESSARY TO PREVENT EROSION.
- AN EROSION CONTROL BARRIER COMPRISING ONLY TOED-IN SILTATION FENCE WILL BE PROPERLY INSTALLED BETWEEN THE COMPLETED REPLICATION AREA AND THE ADJACENT UPLAND SIDE SLOPES.
- PLANTING WILL BE DONE ONLY DURING THE BEGINNING (APRIL 15 THROUGH JUNE) OR END (SEPTEMBER 1 TO NOVEMBER 15) OF THE GROWING SEASON. PLANTING IN THE MID-GROWING SEASON IS ONLY ACCEPTABLE IF IRRIGATION IS PROVIDED. THE PLANTINGS AND SEED MIXTURE IDENTIFIED IN THE FOLLOWING TABLE WILL BE PLANTED IN THE REPLICATION AREA UNLESS THE HERBACEOUS LAYER CAN BE TRANSPLANTED INTO THE REPLICATION AREA.
- THE REPLICATION AREA WILL BE MULCHED WITH 1 TO 2 INCHES OF LEAF COMPOST OR WEED FREE STRAW TO PROVIDE FOR TEMPORARY EROSION CONTROL AND MOISTURE RETENTION.
- THE SIDE-SLOPES OF THE WETLAND REPLICATION AREA WILL BE SEEDED WITH A GRASS/WILDFLOWER OR CONSERVATION MIXTURE DESIGNED TO PROVIDE PERMANENT COVER. AFTER SEEDING, THE SIDE-SLOPES WILL BE MULCHED WITH A THIN LAYER OF STRAW TO PROVIDE FOR TEMPORARY EROSION CONTROL.
- THE REPLICATION AREAS WILL BE INSPECTED, BY A QUALIFIED WETLAND SCIENTIST, AT THE END OF EACH GROWING SEASON FOR A MINIMUM OF THREE YEARS OR UNTIL SUCH TIME AS THE REQUIRED 75% OF VEGETATIVE COVER WITH WETLAND SPECIES HAS BEEN ESTABLISHED. WRITTEN RESULTS OF THESE INSPECTIONS WILL BE SUBMITTED TO THE CONSERVATION COMMISSION. INVASIVE SPECIES WITHIN THE REPLICATION AREA OR WITHIN 25- FEET OF THE REPLICATION AREA SHALL BE HAND PULLED OR CUT.
- AFTER THE WETLAND REPLICATION AREA HAS BECOME VEGETATIVELY STABILIZED AND FOLLOWING APPROVAL OF THE ISSUING AUTHORITY, THE SILTATION FENCE AND ALL WOODEN STAKES WILL BE REMOVED AND DISPOSED OF PROPERLY.

PLANTING PLAN FOR WETLAND REPLICATION AREA:

SPECIES: SIZE: SPACING:	NUMBER:
SAPPLINGS; 6 TO 8' HEIGHT, CONTAINER OR BALLED, BURLAPPED; 15' ON-CENTER AVERAGE	
RED MAPLE (ACER RUBRUM)	26
SHRUBS; 2.5 TO 3' IN HEIGHT, CONTAINER, 6' ON-CENTER AVERAGE SPACING	167 TOTAL*
HIGHBUSH BLUEBERRY (VACCINIUM CORYMBOSUM)	
NANNYBERRY (VIBURNAM LENTAGO)	
WINTERBEERRY (ILEX VERTICILLATA)	
SILKY DOGWOOD (CORNUS AMOMUM)	
HERBACEOUS (PLUGS, SEED OF PLUGS NOT AVAILABLE)	
TUSsock SEDGE (CAREX STRICTA)	38
JOE-PYE-WEED (EUPATORIUM MACULATUM/PURPUREUM)	38
BONESET (EUPATORIUM PERFORIATUM)	38
LURID SEDGE (CAREX LURIDA)	38
SOFT RUSH (JUNCUS EFFUSES)	38
SENSITIVE FERN (ONOCLEA SENSIBILIS)	10
NEW ENGLAND WETLAND PLANTS, NEW ENGLAND WETMIX (OR EQUIVALENT)	2.0 lbs.

* DEPENDING UP AVAILABILITY FROM LOCAL NURSERY STOCK, THESE SPECIES MAY BE SUBSTITUTED WITH SIMILAR NATIVE SPECIES

WETLAND CROSSING SEQUENCE OF WORK:

- INSTALL EROSION CONTROL BARRIER (ECB) AT LOCATION SHOWN ON PLAN.
- INSTALL ADDITIONAL ECB PROTECTION THROUGH SECTION OF WETLAND AT PROPOSED CULVERT.
- CLEAR TREES IN WORK AREA WITHOUT CROSSING EQUIPMENT OVER THE SECTION OF WETLAND TO REMAIN.
- ALL WORK IS TO BE ACCESSED FROM EITHER SIDE OF THE PROPOSED CROSSING. ONLY FOOT TRAFFIC IS PERMITTED IN RESOURCE AREA.
- REMOVE & DISPOSE STUMPS.
- STRIP & STOCKPILE WETLAND SOILS TO BE USED IN REPLICATION AREA. IF WITHIN 100FT WETLAND BUFFER STOCKPILES SHOULD BE SURROUNDED IN HAYBALES & COVERED IN 4 MIL POLY.
- FORM & POUR CONCRETE FOOTING FOR OPEN BOTTOM CULVERT.
- INSTALL CULVERT & ANCHOR TO FOOTING.
- PREPARE CRUSHED STONE BASE FOR PRECAST CONCRETE BLOCK RETAINING WALLS.
- IF DEWATERING IS REQUIRED:
 - USE ELECTRIC SUBMERSIBLE PUMP.
 - USE SUFFICIENT HOSE LENGTHS TO PUMP TO TEMP DRAINAGE SWALE.
 - CONSTRUCT 10X10X1" APRON OF 6-12" RIP RAP AT DISCHARGE POINT.
 - PERIODICALLY INSPECT DISCHARGE POINT & SWALE FOR BUILDUP OF SEDIMENT.
- INSTALL PRECAST CONCRETE BLOCK WALLS.
- IMPORT, PLACE, & COMPACT STRUCTURAL FILL BETWEEN WALLS.
- CONTINUE WITH WALL CONSTRUCTION & FILL PLACEMENT TO SUBGRADE.
- INSTALL TEMPORARY FENCE AT TOP OF WALL.
- INSTALL UTILITIES IN CROSSING AREA.
- INSTALL GRAVEL FOR ROADWAY BASE.
- INSTALL BINDER COURSE OF PAVEMENT.
- INSTALL GRANITE CURBING.
- CONSTRUCT CONCRETE SIDEWALK.
- INSTALL GUARDRAIL & FENCING.
- LOAM & HYDROSEED SHOULDERS.
- PROCEED WITH CONSTRUCTION OF WETLAND REPLICATION AREA.

APPROVED BY THE GRAFTON PLANNING BOARD

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SEE SHEET 28 FOR PLANNING BOARD CONDITIONS OF APPROVAL

GRAPHIC SCALE

20 0 10 20 40 60 80

(IN FEET)

1 inch = 20 ft.

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PREPARED FOR:
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2 RACHEL ROAD
BOYLSTON, MA 01505

1	11/22/2016	TOWN COMMENTS
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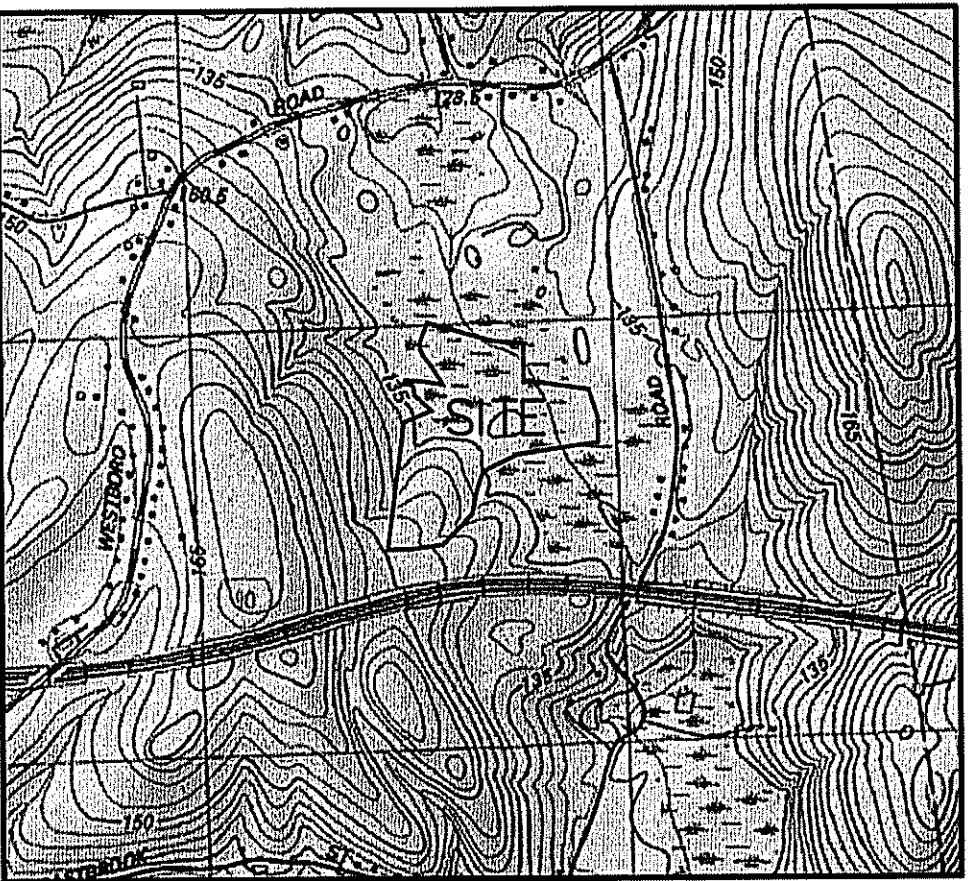
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Sheet Title
Wetland Crossing
&
Replication Area Plan

Job No: 066 Sheet No:
File Name: 066P-WRA01 **21**
Date: October 11, 2016
Scale: 1"=20' OF 28

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LEGEND:

①	PROPOSED LOT NUMBER
	PHASE 1 WATERLINE EXTENSION TO OLD WESTBOROUGH RD.
	PHASE 2 ROADWAY/DRAINAGE/UTILITY CONSTRUCTION
	PHASE 3 WETLAND CROSSING

- INSTALL EROSION CONTROL BARRIER AT LOCATION SHOWN ON PLAN.
- INSTALL ADDITIONAL ECB PROTECTION SECTION OF WETLAND AT PROPOSED CULVERT.
- CLEAR TREES IN WORK AREA WITHOUT CROSSING EQ OVER THE SECTION OF WETLAND TO REMAIN.
- ALL WORK IS TO BE ACCESSED FROM EITHER SIDE OF THE PROPOSED CROSSING-- ONLY FOOT TRAFFIC IS PERMITTED IN RESOURCE AREA.
- REMOVE & DISPOSE STUMPS.
- STRIP & STOCKPILE WETLAND SOILS TO BE USED IN REPLICATION AREA-- STOCKPILE IF WITHIN 100FT WETLAND BUFFER SHOULD BE SURROUNDED IN HAYBALES & COVERED IN 4 MIL POL.
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- NOTE IF DEWATERING IS REQUIRED:
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- CONTINUE WITH WALL CONSTRUCTION & FILL PAVEMENT TO SUBGRADE.
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- LOAM & HYDROSEED SHOULDERS.
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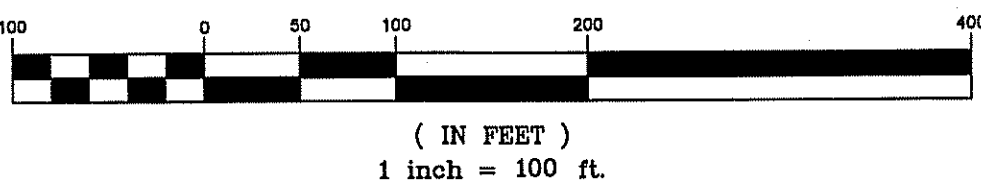
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GRAPHIC SCALE



- LIMIT OF CLEARING TO BE MARKED OUT FOR ENTIRE PROJECT.
- INSTALL EROSION CONTROL BARRIER AND CONSTRUCTION ENTRANCE.
- CUT TREES & CHIP – CHIPS TO BE HAULED OFF SITE.
- REMOVE & DISPOSE STUMPS. STUMPS CAN BE GROUND ON-SITE AND GRINDING TO BE HAULED OFF SITE. WHOLE STUMPS CAN BE HAULED OFFSITE TO A DISPOSAL FACILITY.
- STRIP AND STOCKPILE TOP & SUBSOIL. MAINTAIN A STOCKPILE ON SITE, OUTSIDE OF THE 100 FT BUFFER ZONE, SUFFICIENT TO LOAM LOTS AND DISTURBED AREAS AT THE COMPLETION OF CONSTRUCTION. EXCESS LOAM CAN BE HAULED OFF SITE.
- COMPLETE ROUGH GRADING OF THE SITE TO ESTABLISH SUBGRADE. INFILTRATION BASINS 1,2,3,4 SHALL BE ESTABLISHED TO WITHIN 1FT OF FINISH GRADE. CONSTRUCT TEMPORARY SWALES AS NEEDED TO DIRECT RUNOFF TO THE INFILTRATION BASINS. BASINS SHOULD BE MONITORED THROUGHOUT THE CONSTRUCTION PROCESS TO ENSURE THAT THEY DO NOT BECOME SILTED UP.
- INSTALL STORMWATER DRAINAGE SYSTEMS STARTING WITH CROSS COUNTRY DRAINAGE THAT PICKS UP DISCHARGE FROM THE NORTH GRAFTON ESTATES DETENTION BASIN. ONCE CROSS COUNTRY DRAIN IS COMPLETE, DRAINAGE IMPROVEMENTS SHOULD BE INSTALLED STARTING AT THE INFILTRATION BASINS AND WORKING UPSTREAM. AS EACH CATCHBASIN IS INSTALLED, IT SHOULD BE EQUIPPED WITH A CATCHBASIN INLET FILTER. FILTERS SHOULD BE INSPECTED REGULARLY & CLEANED AS NEEDED.
- INSTALLATION OF WETLANDS CROSSING: SEE SEPARATE SCOPE OF WORK ON WETLAND CROSSING AND REPLICATION AREA PLAN.
- INSTALLATION OF WATER MAINS & SERVICE TUBES.
- INSTALLATION OF ELECTRIC CONDUIT.
- INSTALLATION OF ROADWAY GRAVEL.
- INSTALLATION OF BINDER COURSE OF PAVEMENT.
- INSTALLATION OF CURBING.
- ONCE BINDER COURSE OF PAVEMENT & CURBS ARE INSTALLED, WORK CAN PROCEED ON THE INDIVIDUAL HOUSE LOTS.
- TYPICAL HOUSE LOT SEQUENCED:
 - LOTS WERE CLEARED, STUMPED & STRIPPED AS PART OF ROADWAY CONSTRUCTION SEQUENCE.
 - EXCAVATE FOR FOUNDATIONS.
 - FORM & POUR CONCRETE FOUNDATION.
 - EXCAVATE PIT FOR WASHOUT OF TRUCK TOOLS & EQUIPMENT.
 - BACKFILL FOUNDATION.
 - SUB-GRADE OF LOT.
 - HOUSE CONSTRUCTION: FRAME, ROOF, SIDE, INTERIOR CONSTRUCTION ETC.
 - INSTALLATION OF SEPTIC SYSTEM.
 - INSTALLATION OF WATER SERVICE.
 - INSTALLATION OF UNDERGROUND ELECTRIC SERVICE.
 - INSTALLATION OF GAS SERVICE.
 - FINAL GRADING OF LOT.
 - INSTALLATION OF GRAVEL FOR DRIVEWAY.
 - INSTALLATION OF HARDSCAPES (WALKWAYS, PATIOS, ETC.).
 - PAVE BINDER COURSE OF DRIVEWAY.
 - LOAM & LANDSCAPE INSTALLATION.
 - INSTALLATION OF TOP COAT OF DRIVEWAY.
 - HYDROSEED.

- INSTALLATION OF CONCRETE SIDEWALKS.
- FINAL SHAPING OF INFILTRATION BASINS, INSTALLATION OF FOREBAYS, ETC.
- INSTALLATION OF STREET TREES.
- INSTALLATION OF FENCING.
- INSTALLATION OF SCREENED LOAM ON ALL REMAINING DISTURBED AREAS.
- CLEAR ALL CATCHBASIN SUMPS & FILTERS.
- CLEAN & INSPECT ALL ROADWAY SURFACES.
- CUT & PATCH ANY DAMAGED SECTIONS OF BINDER.
- SAWCUT CONTROL JOINTS WHERE NEW ROADS MEET EXISTING ROADS.
- INSTALLATION OF TOP COURSE OF PAVEMENT & SIGNAGE.
- PREPARE AS-BUILT PLANS.

THESE PLANS WERE PREPARED FOR THE PURPOSE OF OBTAINING STATE AND LOCAL PERMITS AND ARE NOT INTENDED TO BE USED AS CONSTRUCTION DOCUMENTS.

PREPARED FOR:
BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

1	11/22/2016	TOWN COMMENTS
No.	Date	Revision



Br March 11/22/16

Drawn By: JLL Designed By: BRM Checked By: BRM

McCarty Engineering, Inc.
Civil Engineers

42 Jungle Road, Leominster, MA 01453
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Project Name

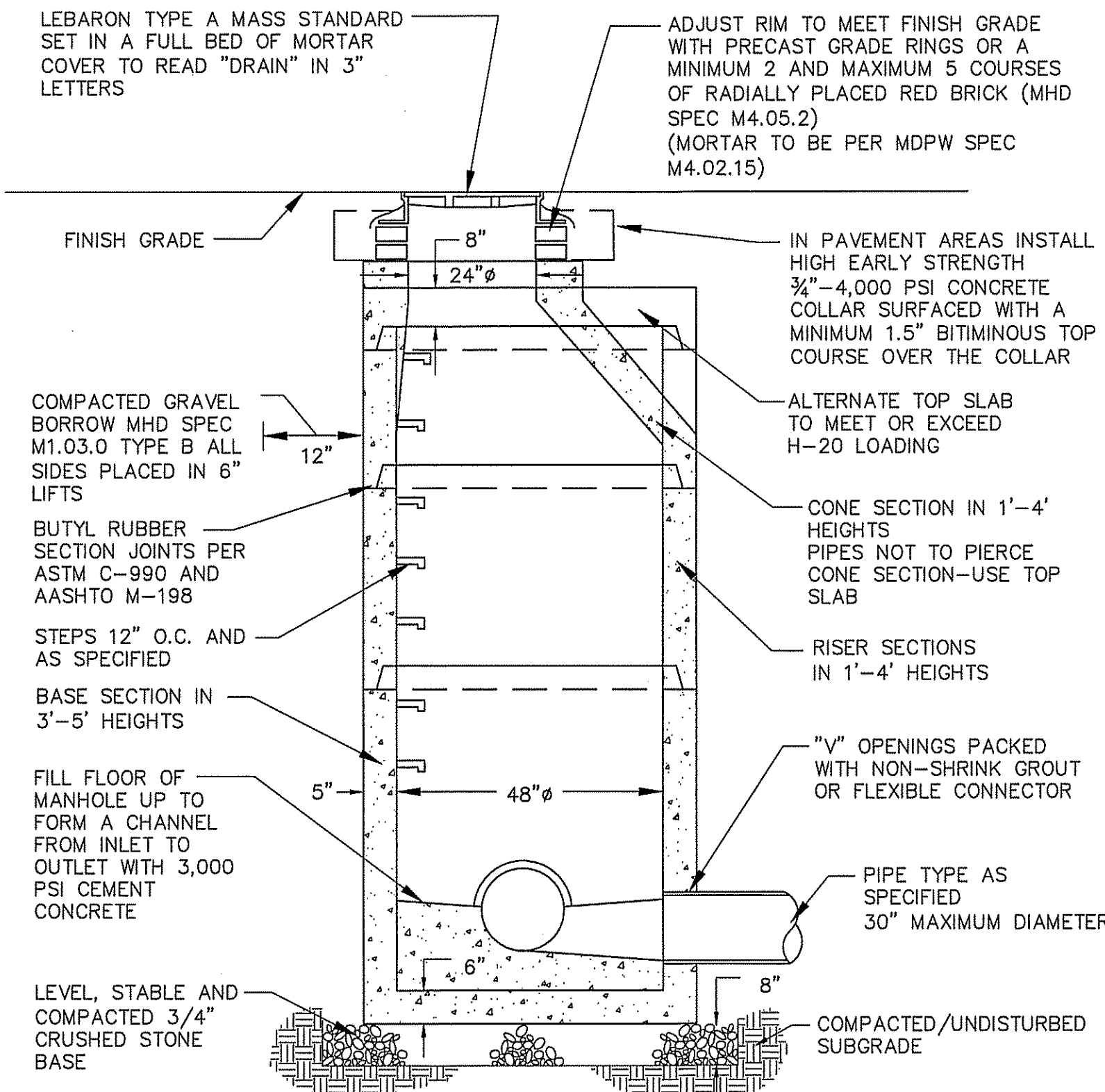
Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536

Sheet Title

Construction Phasing Plan

Job No: 066
File Name: 066P-CSPP01
Date: October 11, 2016
Scale: 1"=100'

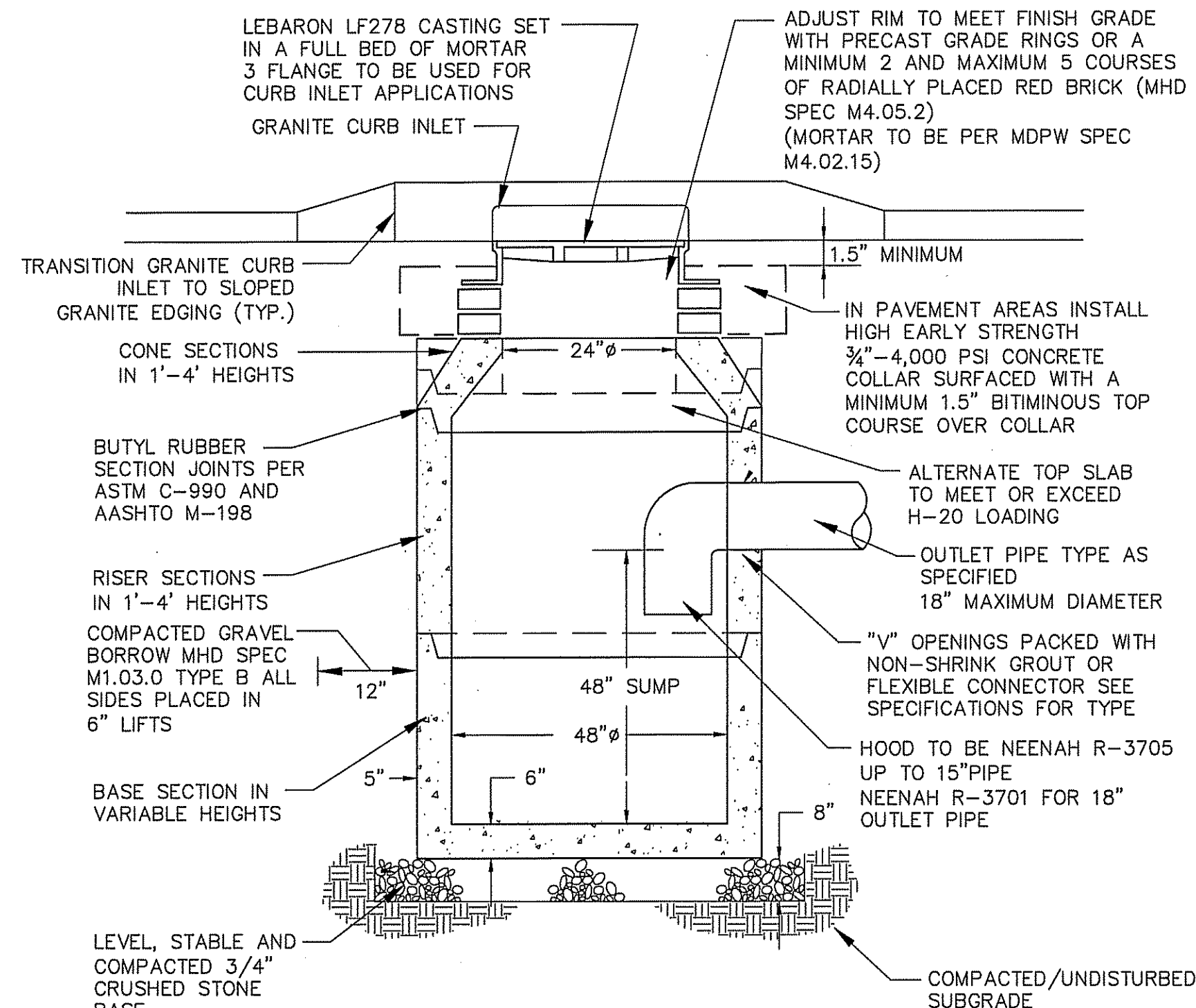
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22
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- NOTES:
1. EXCAVATION TO ALLOW FOR FREE TRAVEL OF COMPACTION EQUIPMENT
 2. ALL COMPACTION TO A MINIMUM 95 PERCENT DRY DENSITY DETERMINED BY ASTM D1557
 3. ALL PRECAST TO MEET OR EXCEED ASTM C-478 AND ASSHTO M 199 SPECIFICATIONS
 4. REINFORCED STEEL TO MEET OR EXCEED ASTM A185 AND H-20 LOADING REQUIREMENTS
 5. ALL PRECAST CONCRETE TO BE 4,000 PSI MINIMUM AND MEET ASTM C-478 (6.1)
 6. IF NO STEPS ARE SPECIFIED THAN AS THE LOCAL MUNICIPALITY REQUIRES OR IF NO MUNICIPALITY REQUIREMENTS THEN COPOLYMER POLYPROPYLENE COATED REINFORCED PER ASTM C-478 AND OSHA (STD 1-1.9)
 7. CONTRACTOR TO CONFIRM WITH CITY OR TOWN DPW THAT BRICK INVERTS ARE NOT A REQUIREMENT
 8. FILL ALL INTERNAL AND EXTERNAL HOLES WITH NON-SHRINK GROUT

PRECAST CONCRETE DRAIN MANHOLE DETAIL

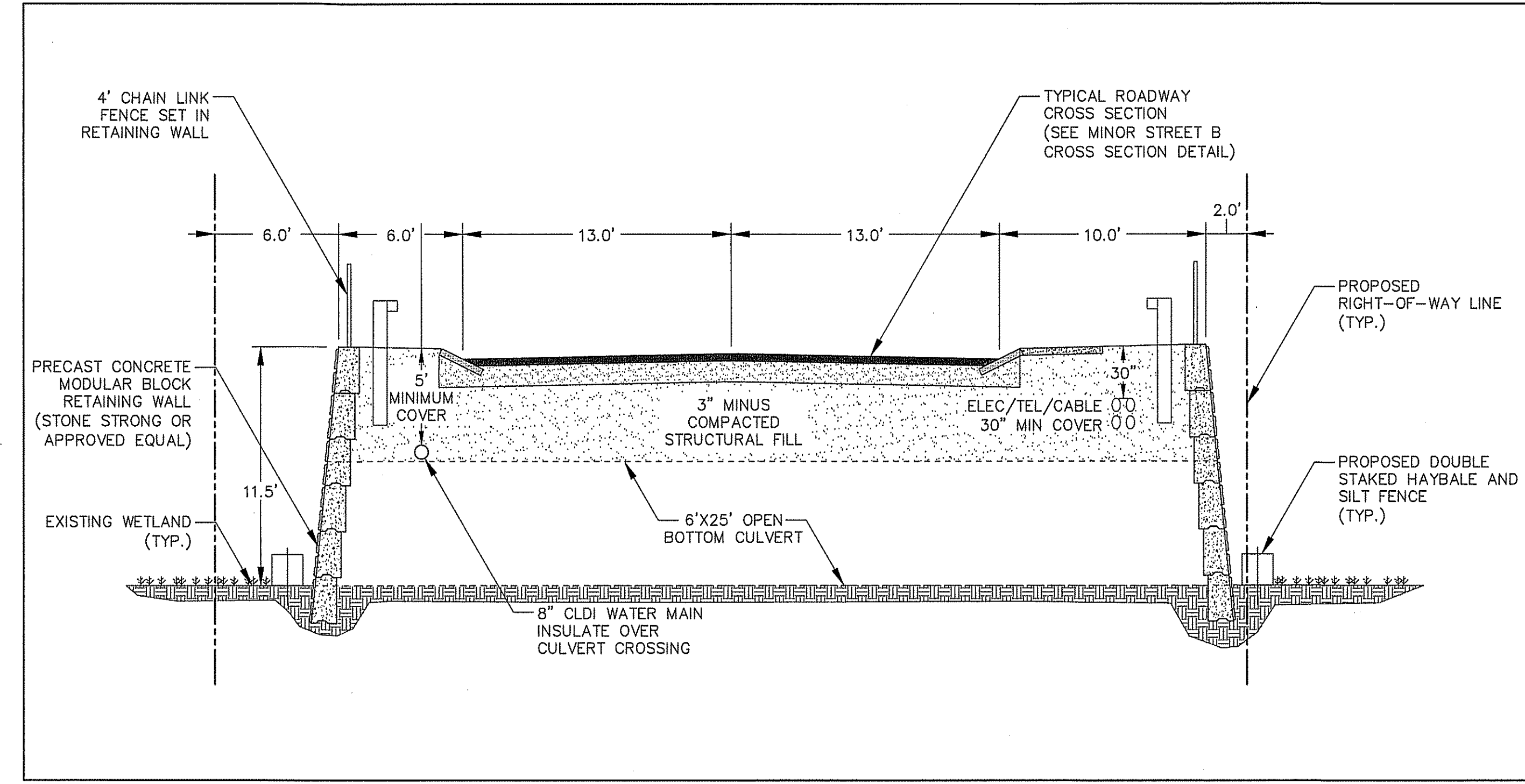
N.T.S.



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 5. ALL PRECAST CONCRETE TO BE 4,000 PSI MINIMUM AND MEET ASTM C-478 (6.1)
 6. ALL INTERIOR HOLES TO BE SEALED WITH NON-SHRINK GROUT
 7. MIN. STRUCTURE DEPTH SHALL BE 7.5 FT.

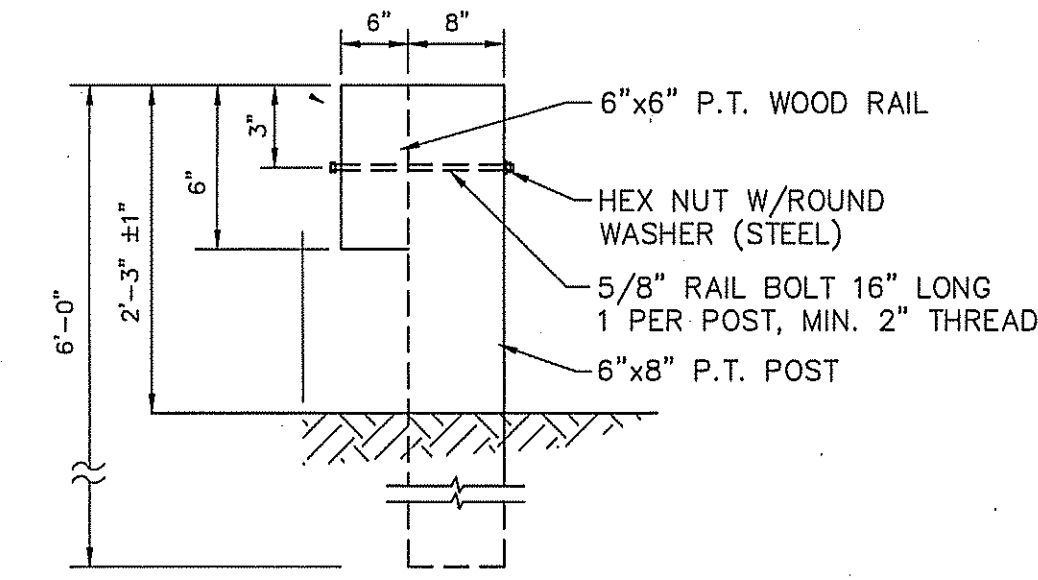
PRECAST CONCRETE CATCH BASIN DETAIL

N.T.S.



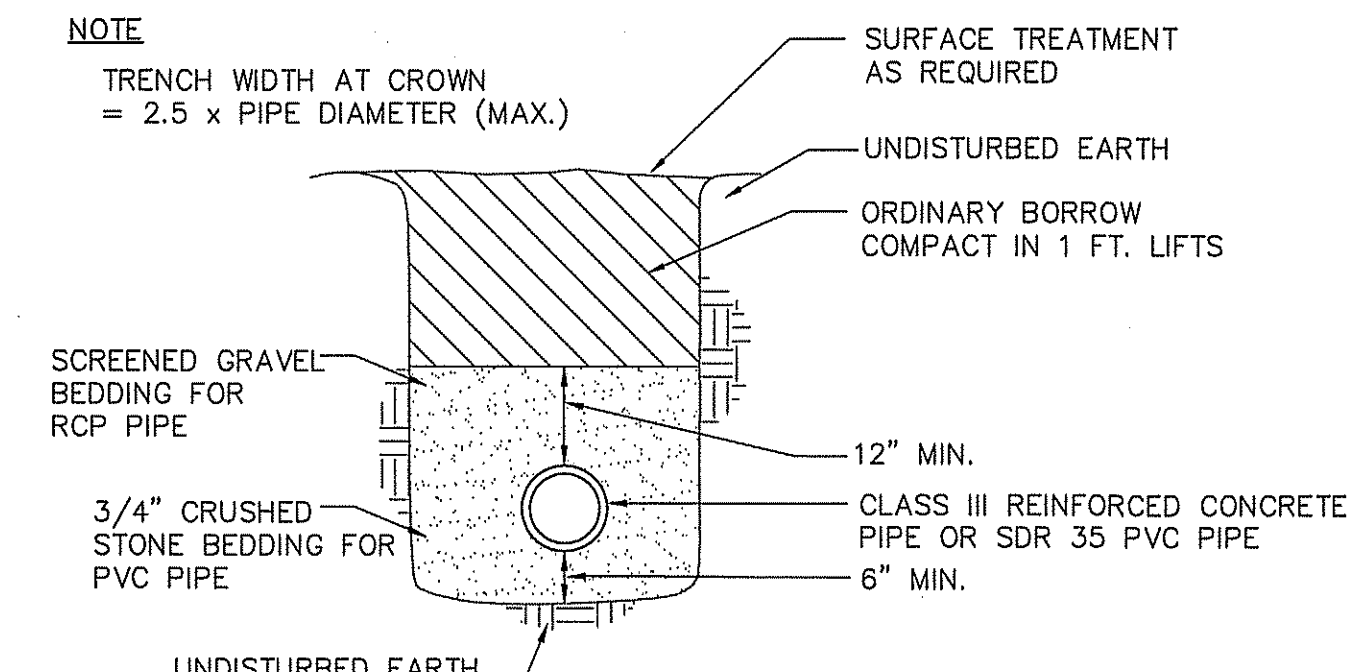
WETLAND CROSSING CROSS SECTION

SCALE: 1"=50'



WOOD GUARD RAIL DETAIL

N.T.S.



DRAIN PIPE TRENCH DETAIL

N.T.S.

APPROVED BY THE GRAFTON PLANNING BOARD

DATE:

I, CLERK OF THE TOWN OF GRAFTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE GRAFTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE NEXT TWENTY DAYS AFTER RECEIPT AND RECORDING OF SAID NOTICE.

TOWN CLERK DATE
SUBJECT TO COVENANT DATED RECORDED AT THE WORCESTER COUNTY REGISTRY OF DEEDS.
BOOK PAGE INSTRUMENT #

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SEE SHEET 28 FOR PLANNING BOARD CONDITIONS OF APPROVAL

NOT FOR CONSTRUCTION
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PREPARED FOR:
BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

No.	Date	Revision
2	11/22/2016	TOWN COMMENTS
1	10/11/2016	TOWN COMMENTS



Drawn By: BRM Designed By: BRM Checked By: JSM

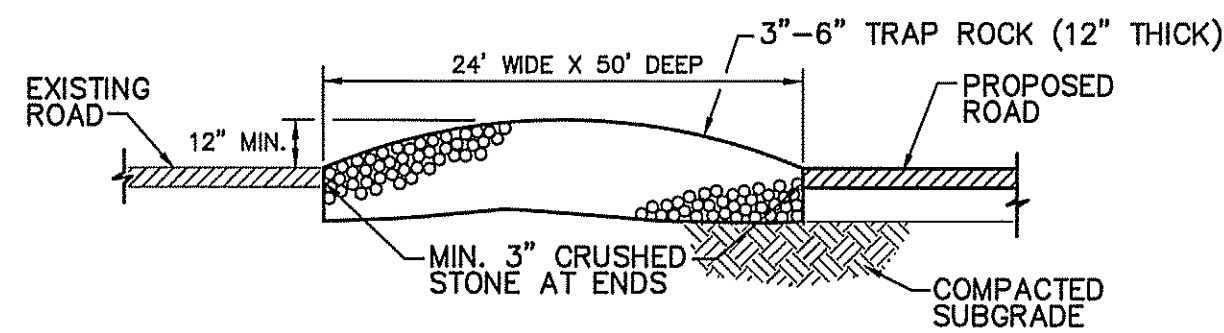
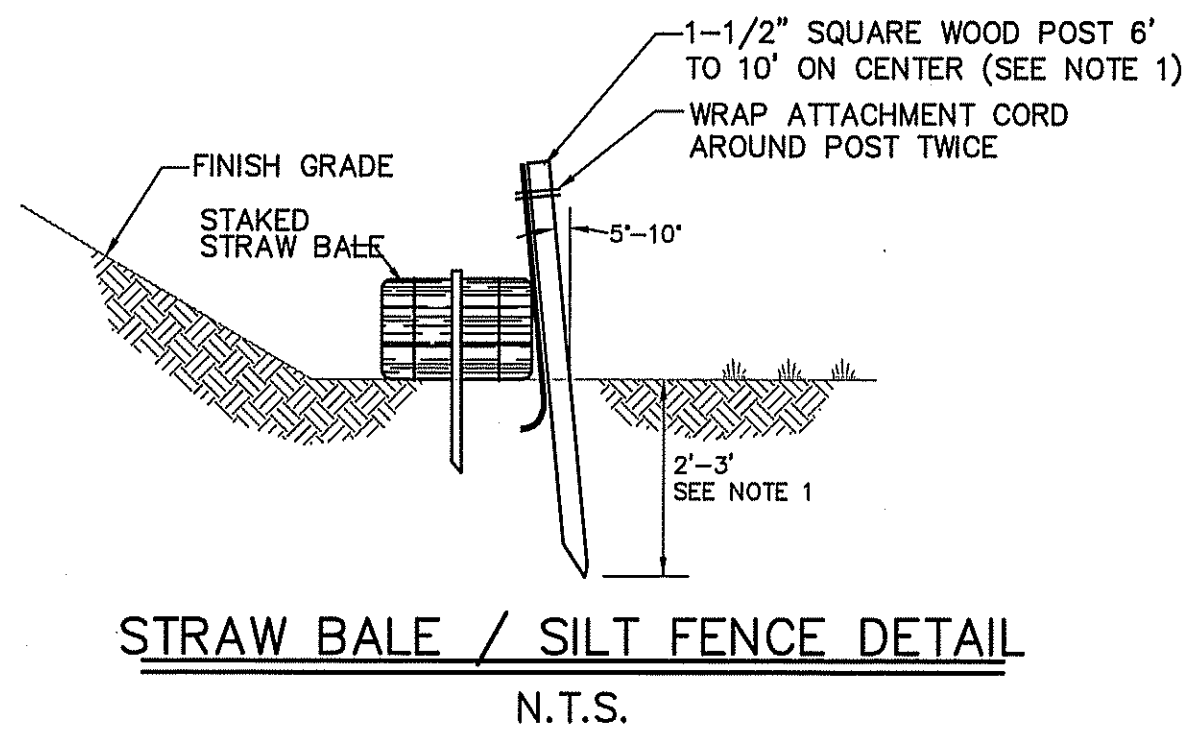
McCarty Engineering, Inc.
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42 Jungle Road, Leominster, MA 01453
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Project Name
Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536

Sheet Title
Construction Details
(1 of 4)

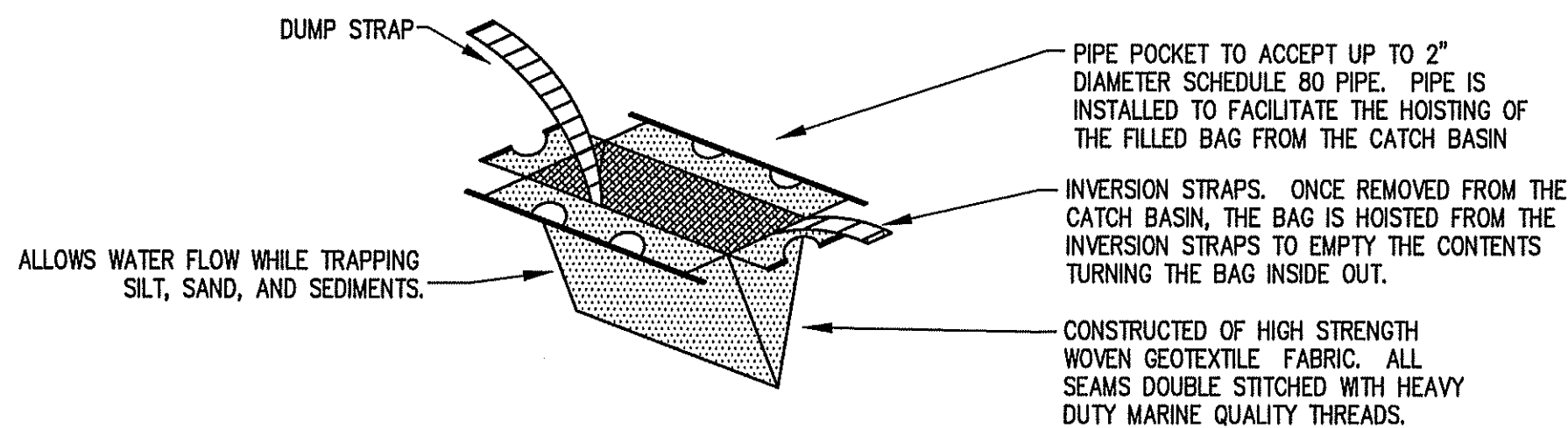
Job No: 066
File Name: 066P-CDT01
Date: June 10, 2016
Scale: AS SHOWN
Sheet No.
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OF 28

- NOTES:
1. DEPTH MAY VARY WITH TRIBUTARY AREA: 2 FT. FOR 100 SF/LF FENCE; 3 FT. FOR 500 SF/LF FENCE, UNLESS POST IS TO BE SET IN PEAT THEN 3 FT. OR DEPTH POSSIBLE BY PUSHING BY HAND SHALL BE REQUIRED.
 2. STRAW WATTLES MAY BE USED A SUBSTITUTE TO STAKED STRAWBALES WITH PRIOR APPROVAL OF THE LOCAL CONSERVATION COMMISSION.



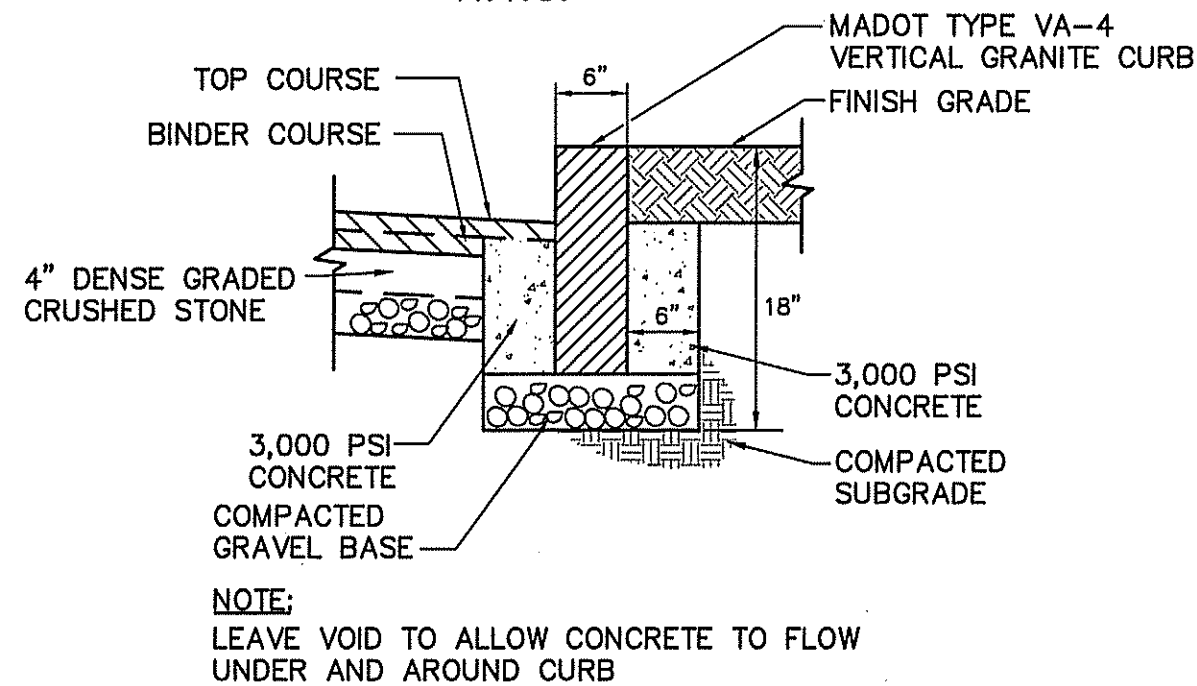
- NOTES:
1. THE PURPOSE OF THIS TEMPORARY BERM IS TO REMOVE MUD FROM THE TIRES OF VEHICLES LEAVING THE SITE DURING CONSTRUCTION.
 2. PROVIDE LEVEL AREA OF CRUSHED STONE 50 FEET IN FROM EDGE OF EXISTING ROAD.

TEMPORARY ENTRANCE BERM
N.T.S.

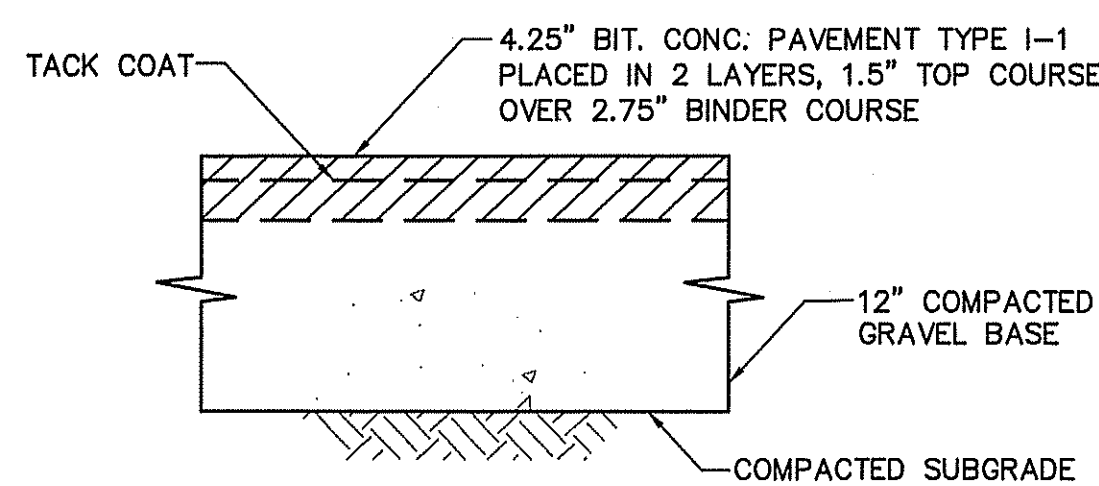


- NOTES:
1. PRODUCT TO BE "SILT SACK" MANUFACTURED BY REED AND GRAHM, INC. SACRAMENTO, CA, OR APPROVED EQUAL.

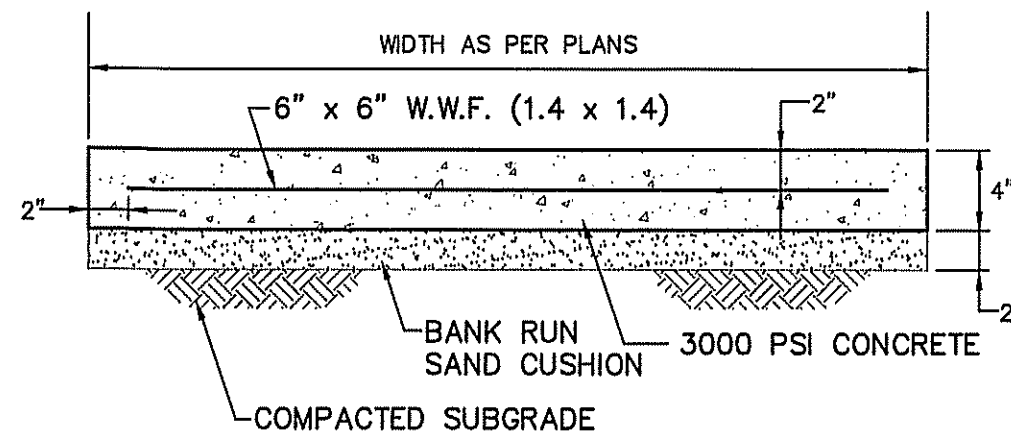
SILT BAG
N.T.S.



VERTICAL GRANITE CURB DETAIL
N.T.S.

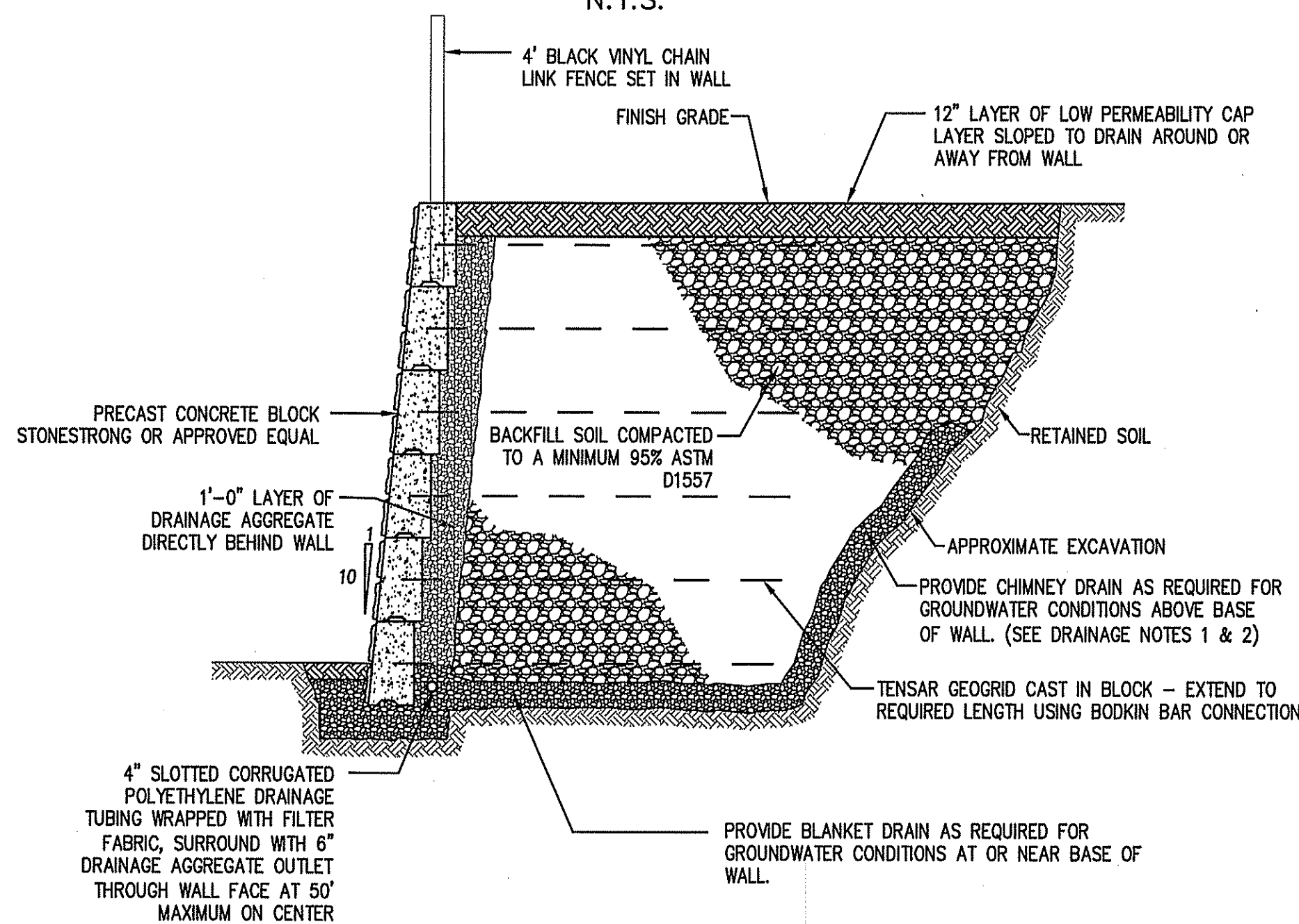


BITUMINOUS CONCRETE PAVEMENT DETAIL
N.T.S.

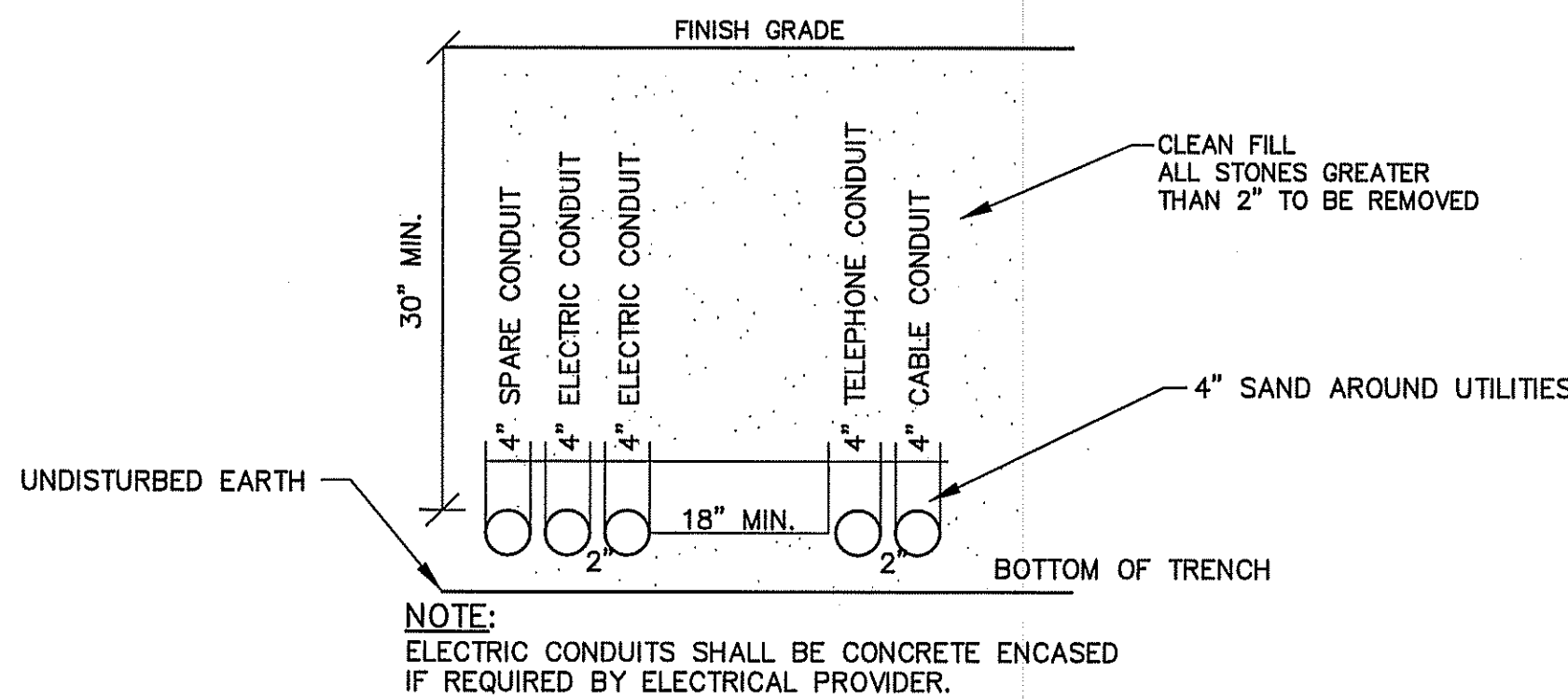


- NOTE:
CONSTRUCTION JOINTS ARE TO BE AT 6' INTERVALS

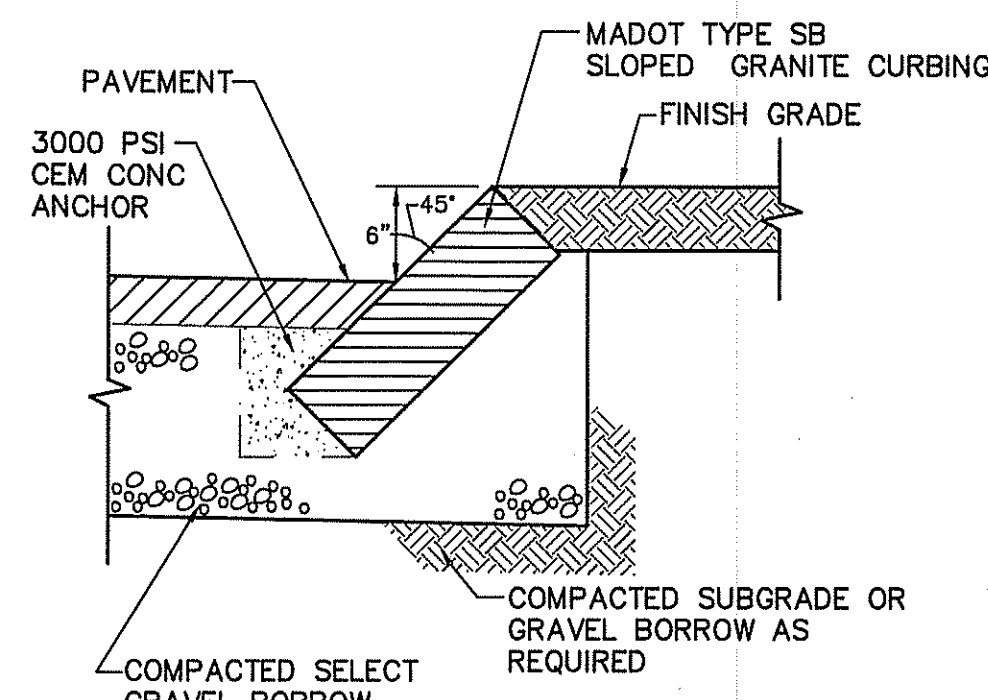
CONCRETE SIDEWALK DETAIL
N.T.S.



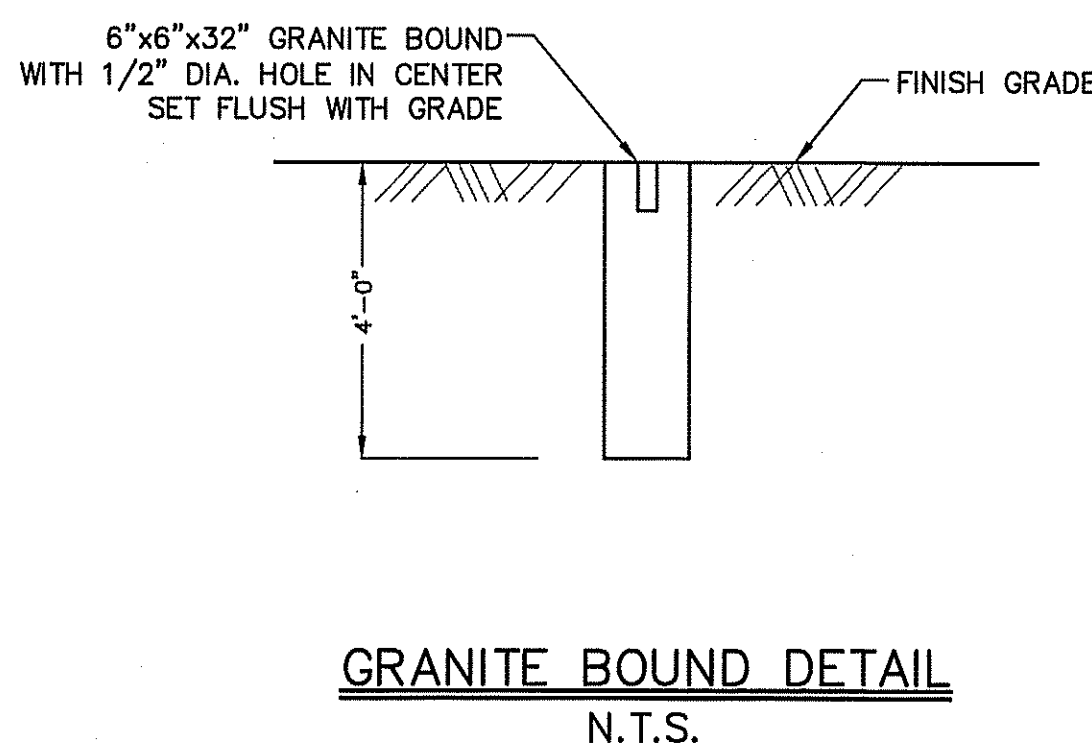
PRECAST CONCRETE RETAINING WALL DETAIL
N.T.S.



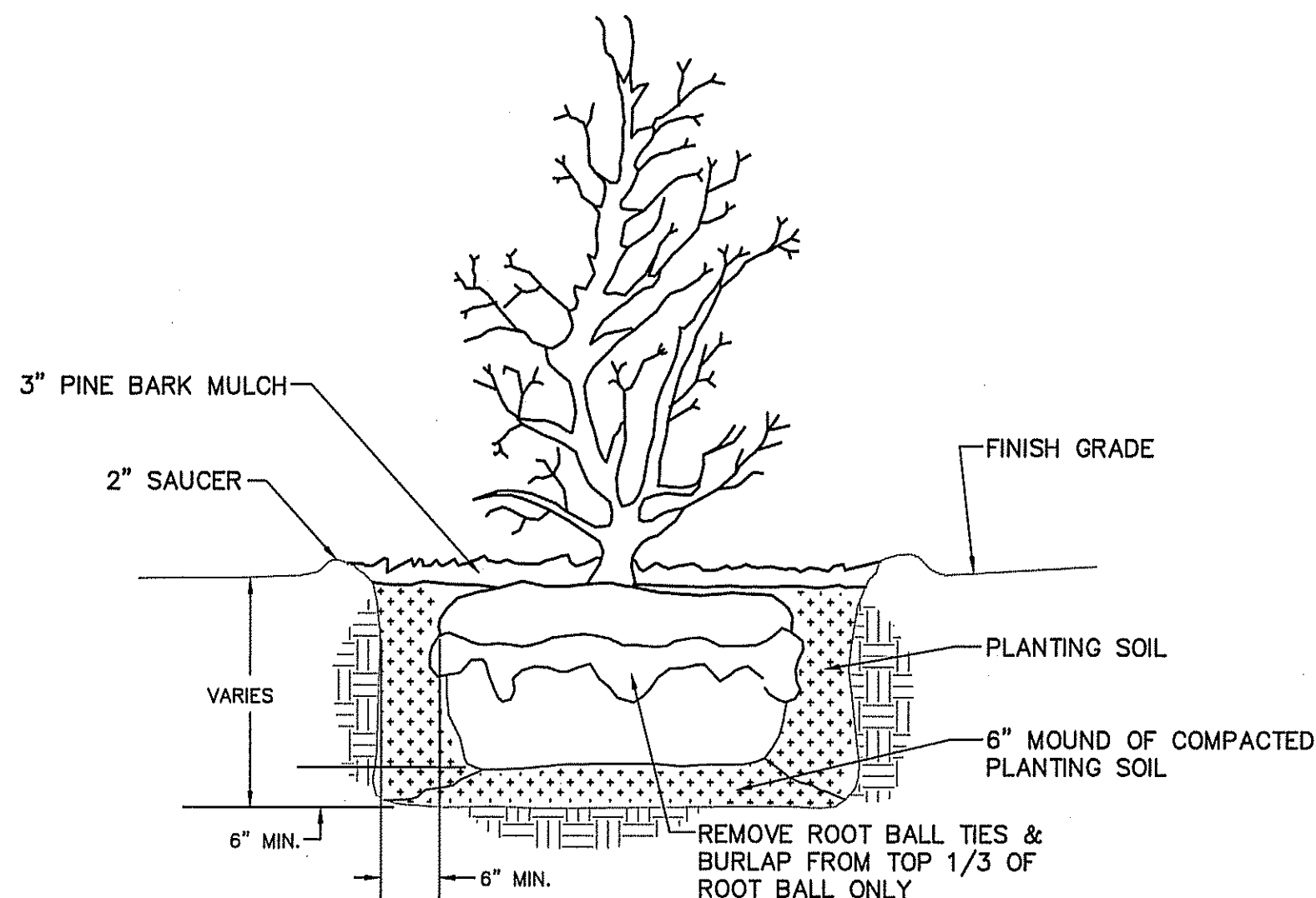
TYPICAL ELECTRIC UTILITY TRENCH DETAIL
N.T.S.



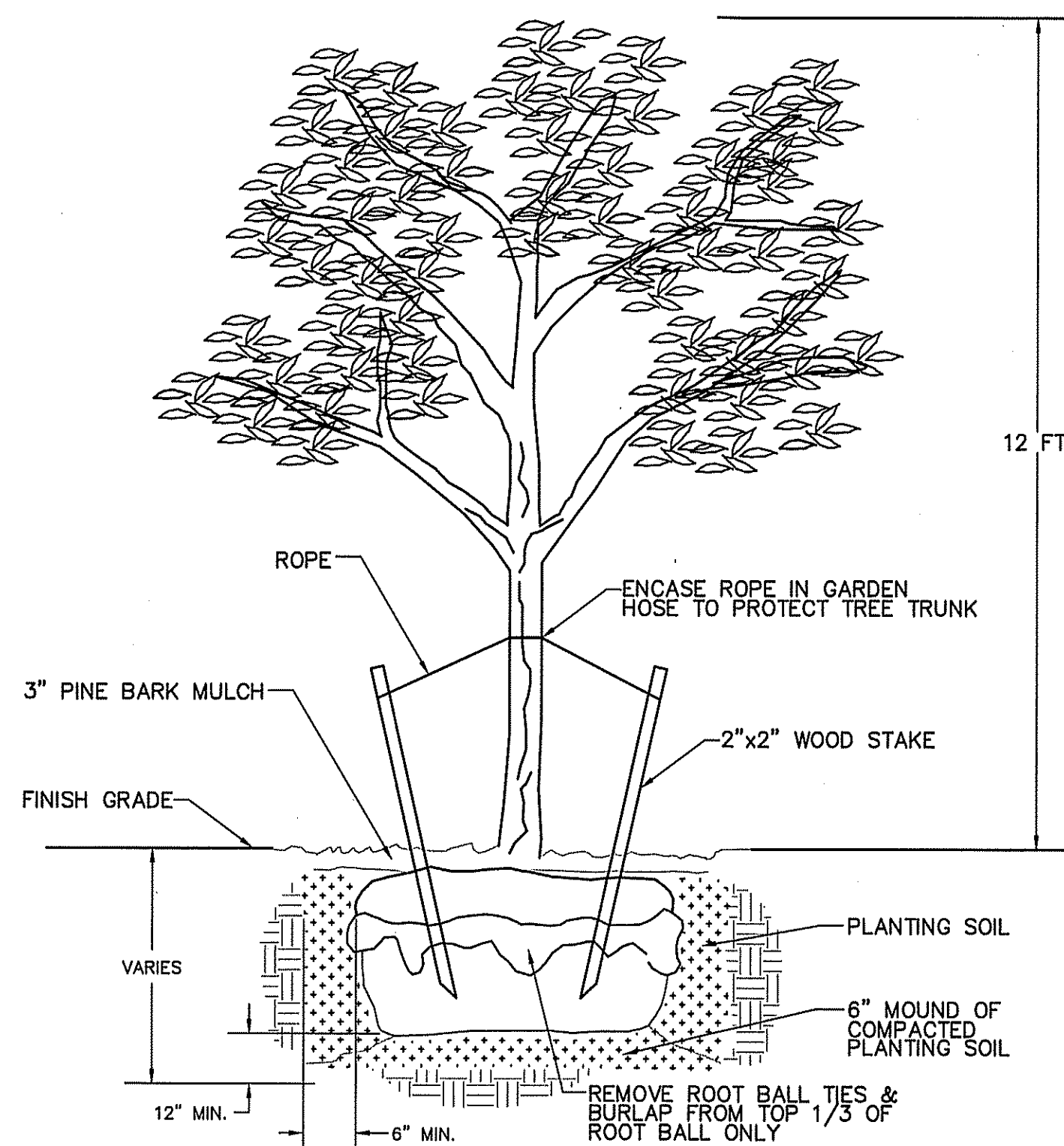
SLOPED GRANITE CURB DETAIL
N.T.S.



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TYPICAL SHRUB PLANTING DETAIL
N.T.S.



TYPICAL TREE PLANTING DETAIL
N.T.S.

APPROVED BY THE GRAFTON
PLANNING BOARD

DATE:

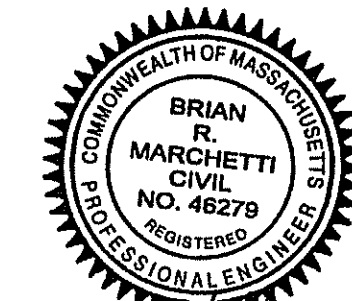
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PREPARED FOR:
BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

No.	Date	Revision
2	11/22/2016	TOWN COMMENTS
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Drawn By: BRM
Designed By: BRM
Checked By: JSCM

McCarty Engineering, Inc.
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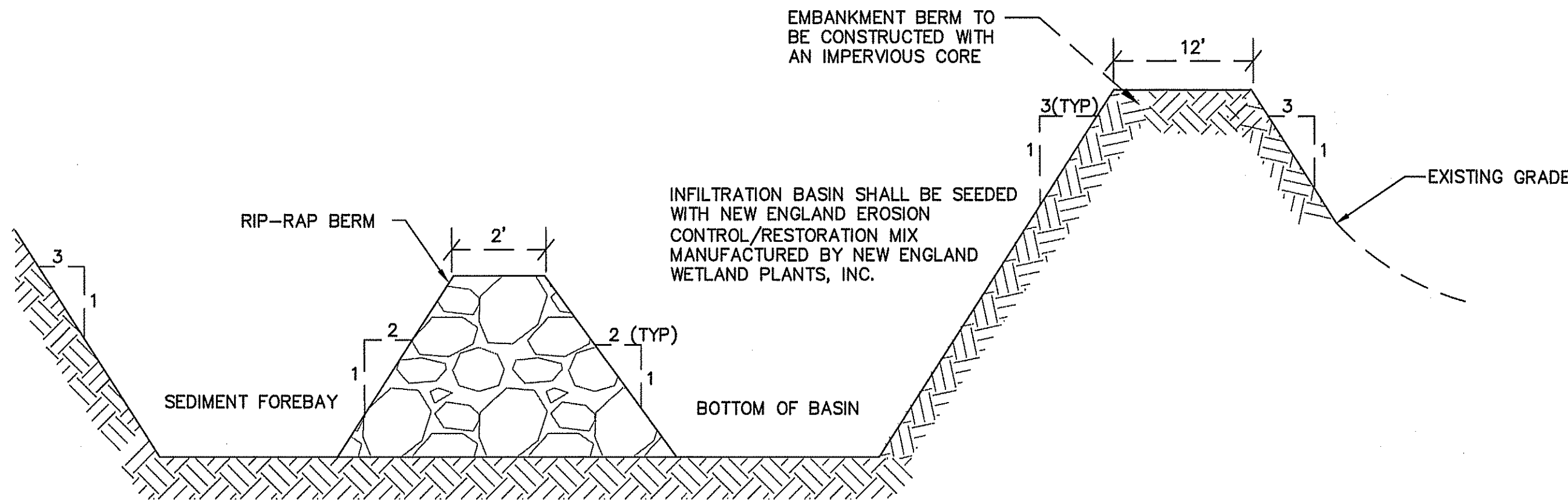
Project Name
Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536

Sheet Title
Construction Details
(2 of 4)

Job No: 066
File Name: 066P-CDT02
Date: June 10, 2016
Scale: AS SHOWN
Sheet No.
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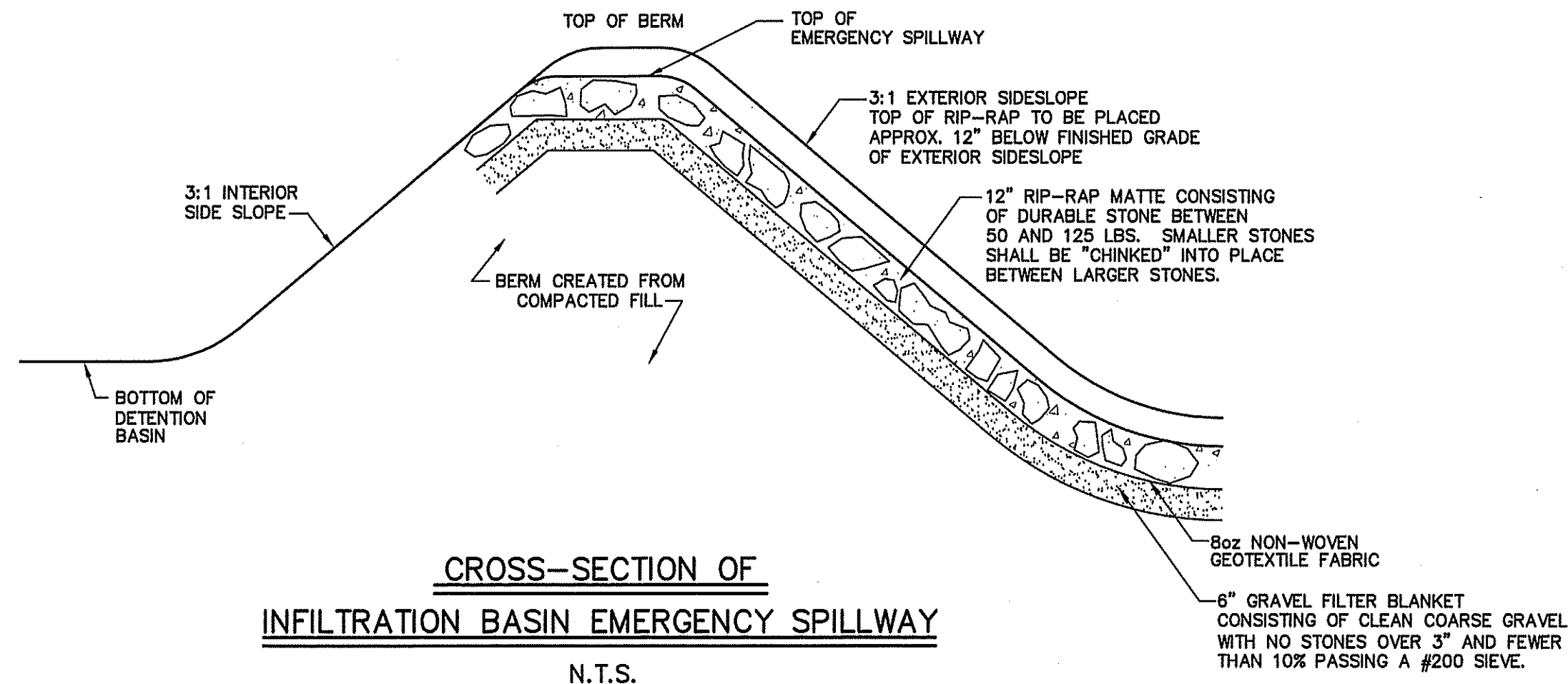
SEE SHEET 28 FOR PLANNING BOARD CONDITIONS OF APPROVAL

Job No: 066
File Name: 066P-CDT03
Date: June 10, 2016
Scale: AS SHOWN

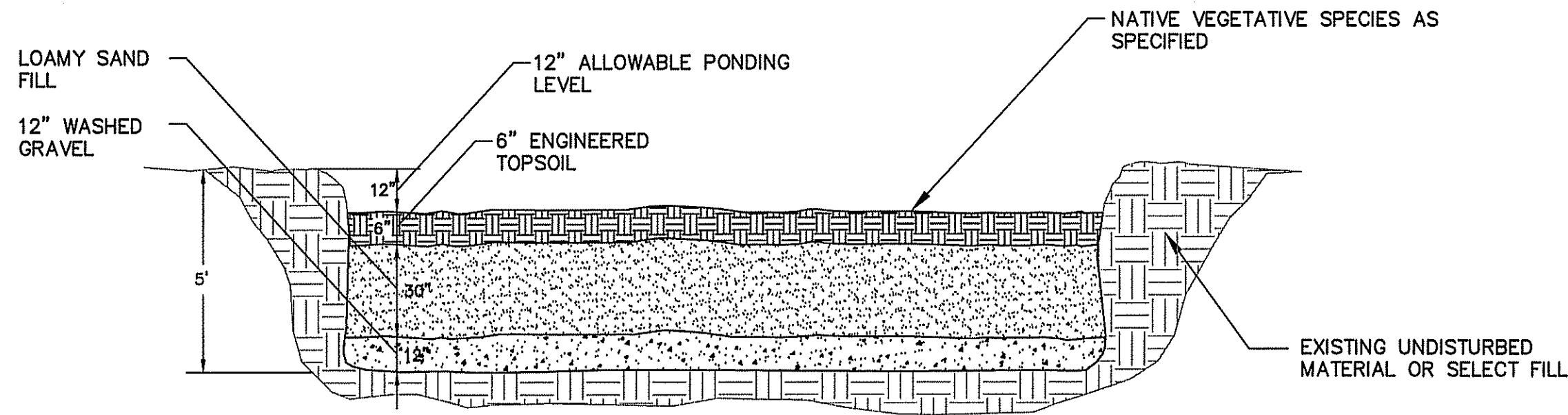


NOTE:
 1. SEAL AROUND OUTLET PIPE WITH IMPERVIOUS BARRIER
 2. A 6" PERFORATED UNDERDRAIN SHALL BE INSTALLED IN EACH INFILTRATION BASIN WITH A 6" VALVE THAT SHALL BE EASILY ACCESSIBLE AND SHALL REMAIN CLOSED DURING NORMAL OPERATION. THE UNDERDRAIN SHALL OUTLET IN THE RIP RAP MAT AS SHOWN ON THE GRADING AND DRAINAGE PLANS.

CROSS-SECTION OF TYPICAL INFILTRATION BASIN DETAIL
 N.T.S.



CROSS-SECTION OF INFILTRATION BASIN EMERGENCY SPILLWAY
 N.T.S.



NOTES:
 1. ENGINEERED TOPSOIL SHALL BE COMPOSED OF 50% SAND, 30% LOAM AND 20% COMPOST.

2. VEGETATION WITHIN RAIN GARDENS AND BIORETENTION BASINS MUST BE ABLE TO TOLERATE EXPECTED POLLUTANT LOADINGS, HIGHLY VARIABLE MOISTURE CONDITIONS AND PONDING WATER FLUCTUATIONS.

THE FOLLOWING SPECIES ARE RECOMMENDED FOR USE IN RAINGARDENS. MIXTURE OF PLANTINGS SHOULD BE CHOSEN TO MIMIC APPEARANCE OF ADJACENT WETLAND AREAS. THE NUMBER OF PLANTS REQUIRED VARIES WITH THE SIZE OF THE RAIN GARDEN BEING PROPOSED. ONCE THE GRADING OF THE RAINGARDEN IS COMPLETE AND THE FILL IS PLACED WITHIN IT, A LANDSCAPE ARCHITECT SHALL MAKE A SITE INSPECTION TO ADVISE THE CONTRACTOR ON THE NUMBER, SIZE, AND PLACEMENT OF THE PLANTINGS.

TREES:

ACER RUBRUM
 BETULA NIGRA
 LARIX LARCINA
 LIQUIDAMBAR STYRACIFLUA
 NYSSA SYLVATICA
 SAMBUCUS CANADENSIS

RED MAPLE
 RIVER BIRCH
 EASTERN LARCH
 SWEETGUM
 BLACK GUM
 AMERICAN ELDERBERRY

SHRUBS/GROUND COVER:

AMELANCHIER CANADENSIS
 ARONIA ARBUTIFOLIA
 CORNUS SERICEA
 HAMAMELIS VIRGINIANA
 LLEX GLABRA
 LLEX VERTICILLATA
 KALMIA LATIFOLIA
 VACCINIUM CORYMBOSUM
 VIBURNUM DENTATUM

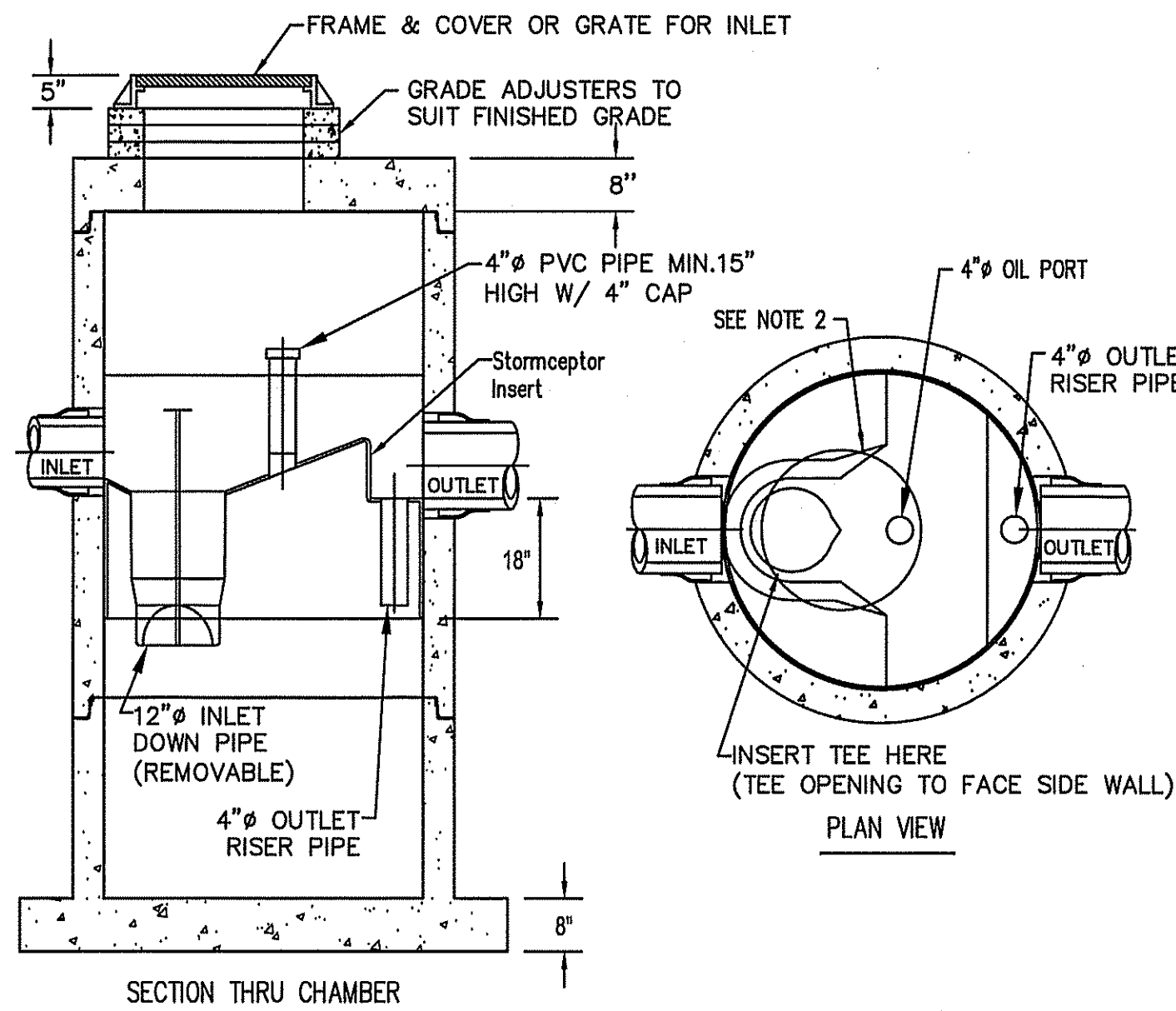
SHADBLOW SERVICEBERRY
 RED CHOKEBERRY
 RED TWIG DOGWOOD
 WITCH HAZEL
 INKBERRY
 WINTERBERRY
 MOUNTAIN LAUREL
 Highbush BLUEBERRY
 ARROWWOOD

HERBACEOUS:

NEW ENGLAND WETLAND PLANTS - WETLAND SEED MIX
 ACORUS CALAMUS
 CAREX PENDULA
 EUPATORIUM MACULATUM
 IRIS SIBERICA
 IRIS VERSICOLOR
 LOBELIA CARDINALIS
 OSMUNDA REGALIS
 OSMUNDA CINNAMOMEA

SWEET FLAG
 DROOPING SEDGE
 JOE PYE WEED
 SIBERIAN IRIS
 BLUE FLAG IRIS
 CARDINAL FLOWER
 ROYAL FERN
 CINNAMON FERN

RAINGARDEN DETAIL



NOTES:
 1. THE USE OF FLEXIBLE CONNECTION IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
 2. THE COVER SHOULD BE POSITIONED OVER THE INLET DROP PIPE AND THE OIL PORT.
 3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
 4. CONTACT A CONCRETE PIPE DIVISION REPRESENTATIVE FOR FURTHER DETAILS NOT LISTED ON THIS DRAWING.

STC 450 WATER QUALITY UNIT
 N.T.S.

APPROVED BY THE GRAFTON PLANNING BOARD

DATE:

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 2 RACHEL ROAD
 BOYLSTON, MA 01505

No.	Date	Revision
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 Designed By: BRM
 Checked By: ZSC

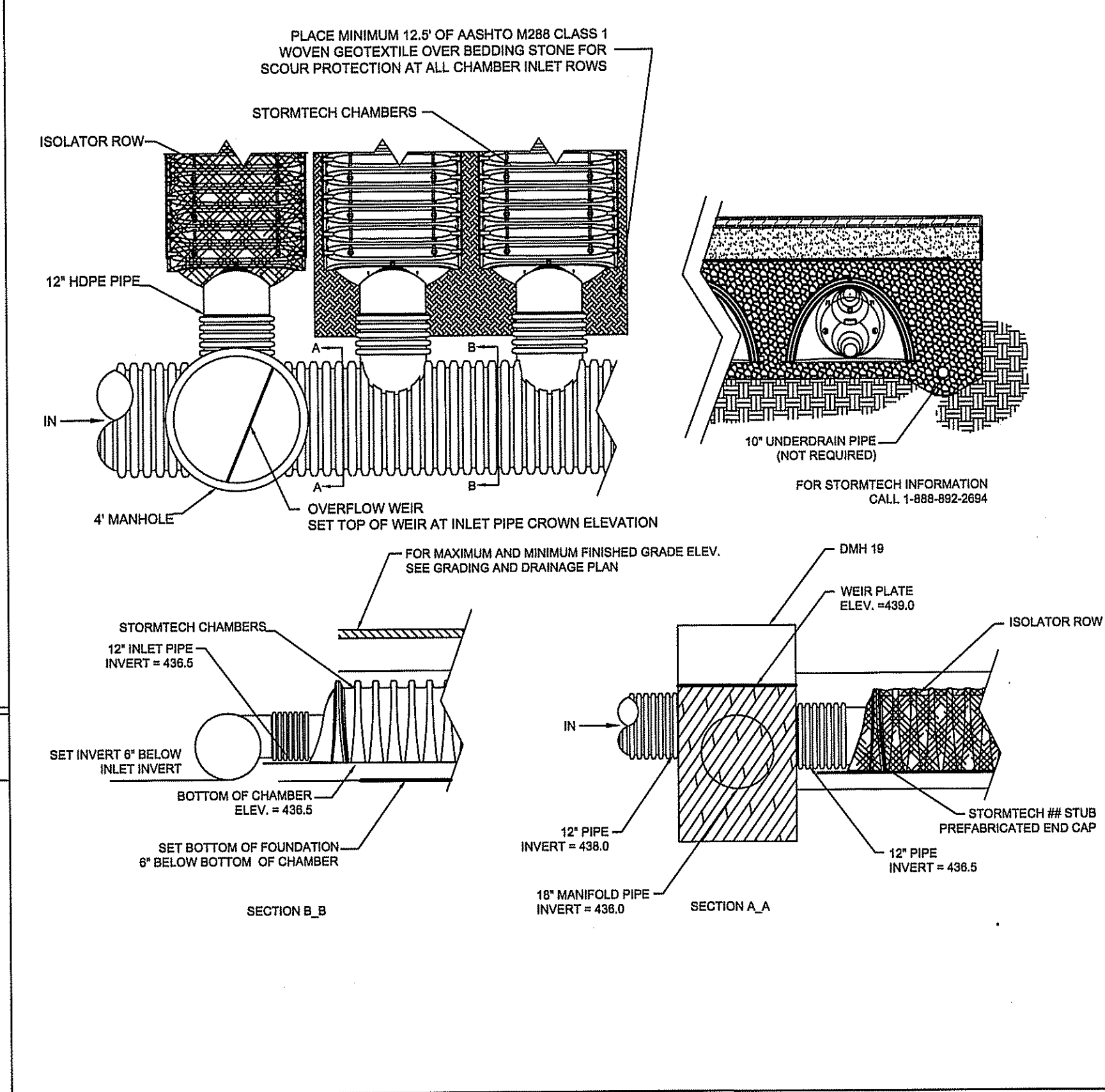
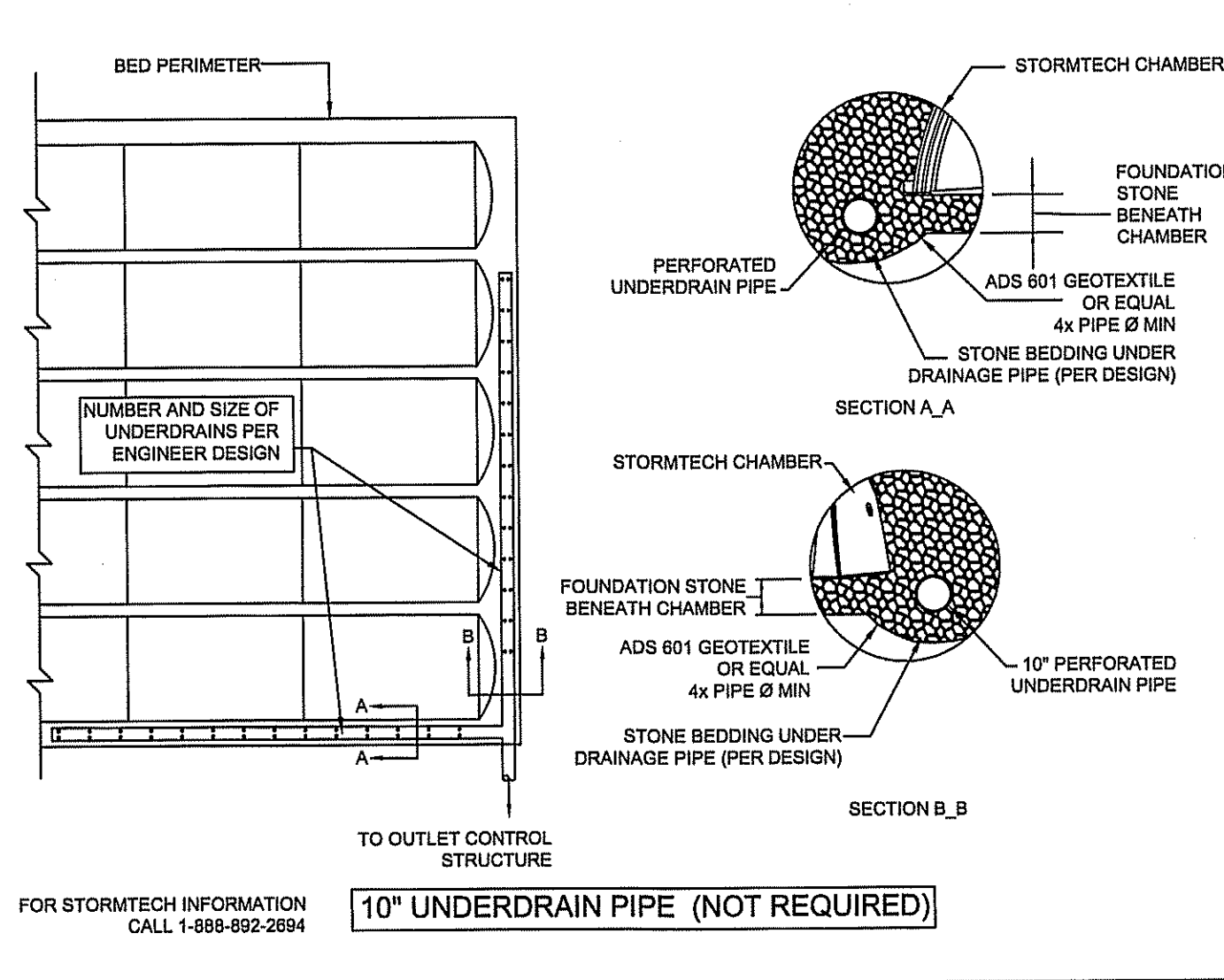
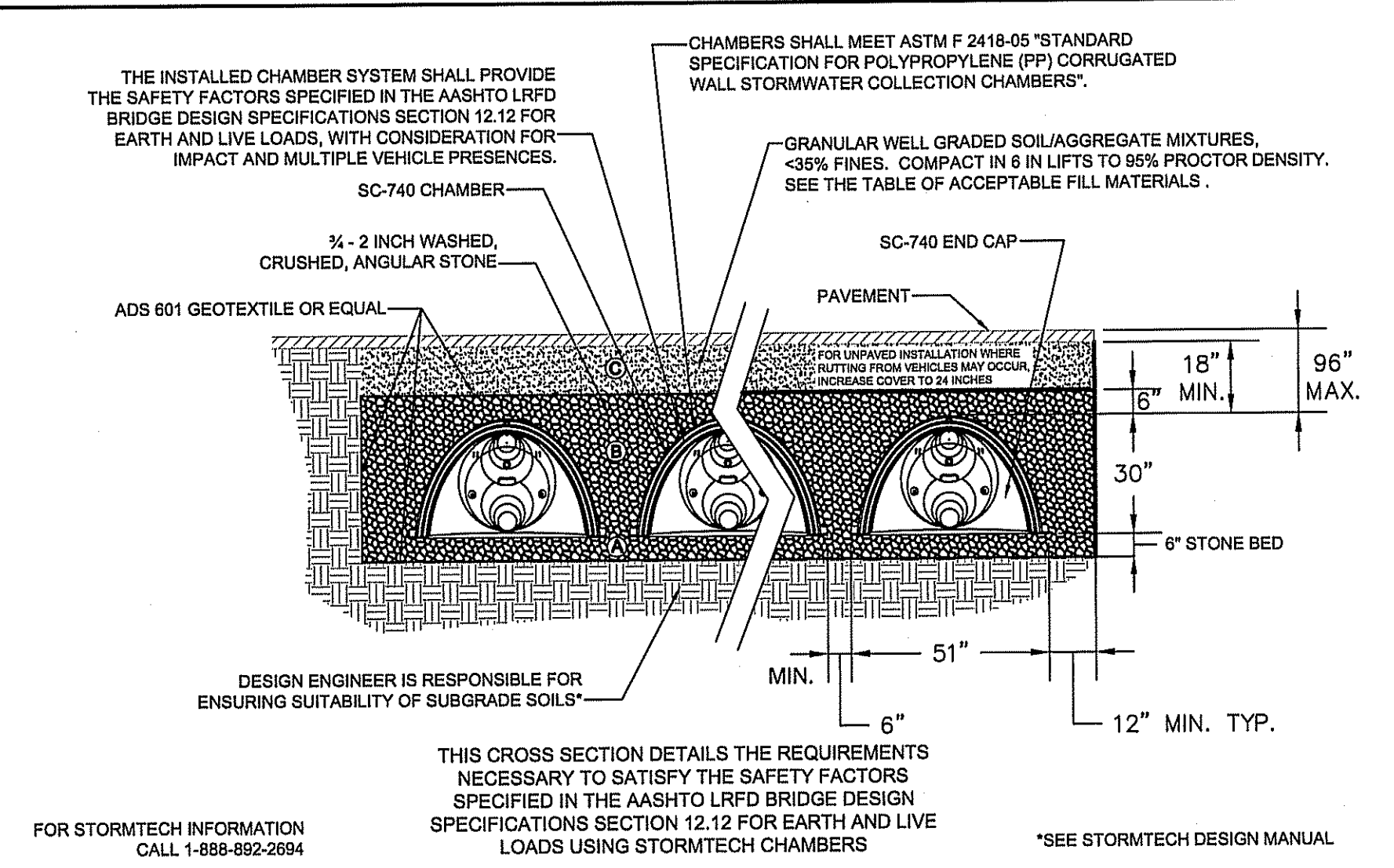
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Project Name
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Definitive Plan
N. Grafton, MA 01536

Sheet Title
Construction Details
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Job No: 066
 File Name: 066P-CDT04
 Date: June 10, 2016
 Scale: AS SHOWN

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 OF 28



ACCEPTS 4" SCH 40 PIPE FOR INSPECTION PORT

90.7" ACTUAL LENGTH

51"

30.0"

85.4" INSTALLED

NOMINAL CHAMBER SPECIFICATIONS

SIZE (W x H x INSTALLED LENGTH) -

CHAMBER STORAGE - 45.3 CUBIC FEET

MINIMUM INSTALLED STORAGE - 74.8 CUBIC FEET

WEIGHT -

61.0" x 30.0" x 85.4" 45.3 CUBIC FEET 74.8 CUBIC FEET 75 LBS.

STUBS AT TOP OF END CAP FOR PARTS NUMBERS ENDING WITH "1"

STUBS AT BOTTOM OF END CAP FOR PARTS NUMBERS ENDING WITH "2"

PART #	CHAMBER	PIPE SIZE	A	B	C	D
SC740EP007	SC 740	8 in (203 mm)	10.00 in (257 mm)	3.00 in (76 mm)	16.00 in (407 mm)	N/A
SC740EP008	SC 740	8 in (203 mm)	10.00 in (257 mm)	3.00 in (76 mm)	N/A	5.00 in (127 mm)
SC740EP009	SC 740	10 in (254 mm)	14.70 in (373 mm)	7.70 in (195 mm)	12.80 in (325 mm)	N/A
SC740EP010	SC 740	12 in (305 mm)	14.70 in (373 mm)	7.70 in (195 mm)	N/A	1.50 in (38 mm)
SC740EP011	SC 740	15 in (381 mm)	18.40 in (467 mm)	10.30 in (263 mm)	8.00 in (203 mm)	N/A
SC740EP012	SC 740	15 in (381 mm)	18.40 in (467 mm)	10.30 in (263 mm)	N/A	1.50 in (38 mm)
SC740EP013	SC 740	18 in (457 mm)	18.70 in (475 mm)	10.70 in (272 mm)	8.00 in (203 mm)	N/A
SC740EP014	SC 740	18 in (457 mm)	18.70 in (475 mm)	10.70 in (272 mm)	8.00 in (203 mm)	N/A
SC740EP015	SC 740	18 in (457 mm)	18.70 in (475 mm)	10.70 in (272 mm)	N/A	1.50 in (38 mm)
SC740EP016	SC 740	24 in (609 mm)	18.00 in (457 mm)	5.45 in (139 mm)	N/A	0.10 in (2 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL.

ALL STUBS EXCEPT FOR THE SC740EP016 ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 888-892-2694.

* FOR THE SC740EP016 THE 54" STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.9". BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE 54" STUB SO THAT THE FITTING IS LEVEL.

ST 1.0

SC-740 TYPICAL CROSS SECTION

ST 2.0

STORMTECH UNDERDRAIN DETAIL

ACCEPTABLE FILL MATERIALS
STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	AASHTO M145 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
FILL MATERIAL FROM 18" TO GRADE ABOVE CHAMBERS	ANY SOIL/ROCK MATERIALS, NATIVE SOILS OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	N/A	PREPARE PER ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
FILL MATERIAL FOR 6" TO 18" ELEVATION ABOVE CHAMBERS (24" FOR UNPAVED INSTALLATIONS)	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES.	3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 76, 8, 89, 9, 10	A-1 A-2 A-3	COMPACT IN 6" LIFTS TO A MINIMUM 95% STANDARD PROCTOR DENSITY. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 LBS. DYNAMIC FORCE NOT TO EXCEED 20,000 LBS.
EMBEDMENT STONE SURROUNDING AND TO A 6" ELEVATION ABOVE CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4" - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	NO COMPACTION REQUIRED
FOUNDATION STONE BELOW CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4" - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY

PLEASE NOTE: THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE WASHED CRUSHED ANGULAR. FOR EXAMPLE, THE STONE MUST BE SPECIFIED AS WASHED, CRUSHED, ANGULAR NO. 4 STONE.

- NOTES:
1. ALL DESIGN SPECIFICATIONS FOR STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE STORMTECH DESIGN MANUAL.
 2. THE INSTALLATION OF STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
 3. THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL 1-888-892-2694 OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
 4. CHAMBERS SHALL MEET THE DESIGN REQUIREMENTS AND SAFETY FACTORS SPECIFIED IN SECTION 12.12 OF THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

ST 8.0

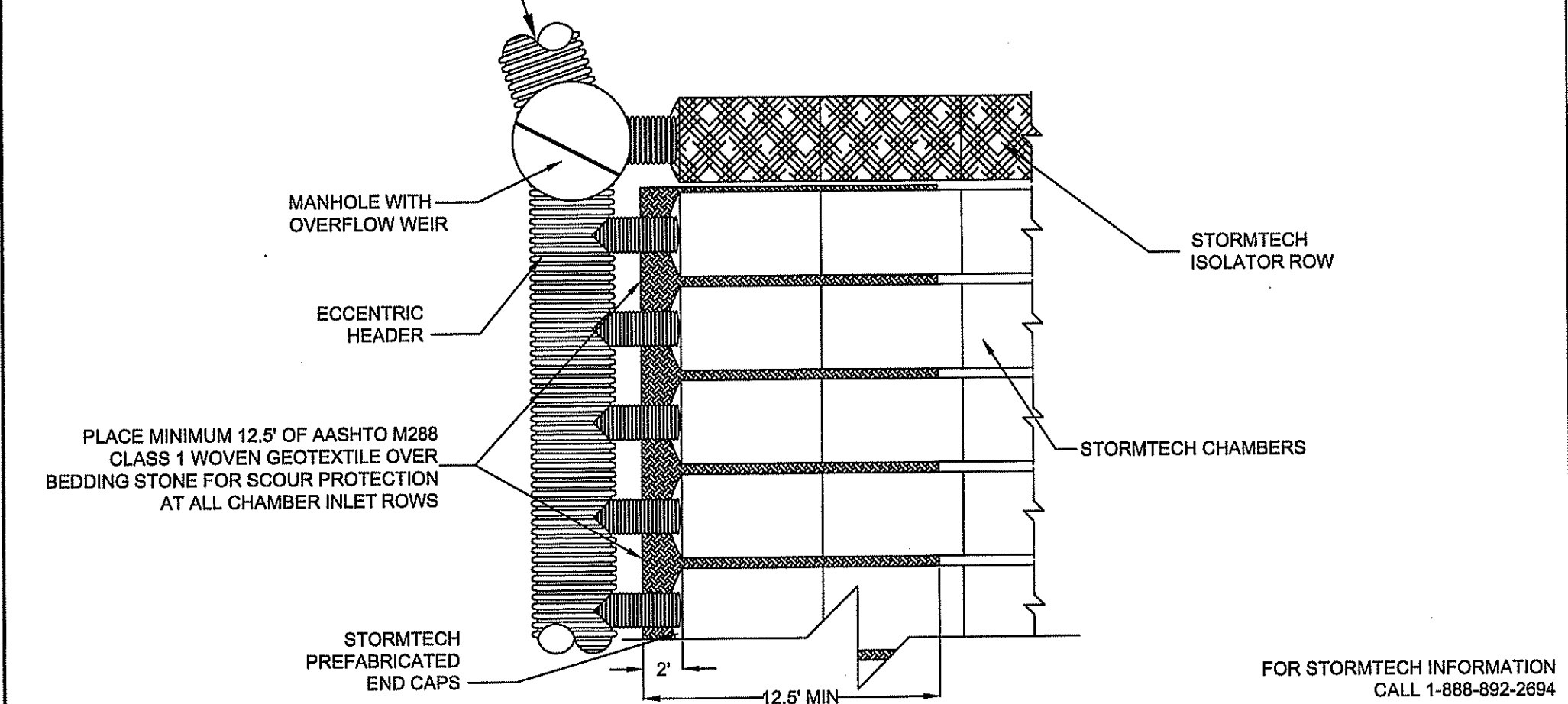
STORMTECH ELEVATIONS

ST 9.0

TECHNICAL DETAILS

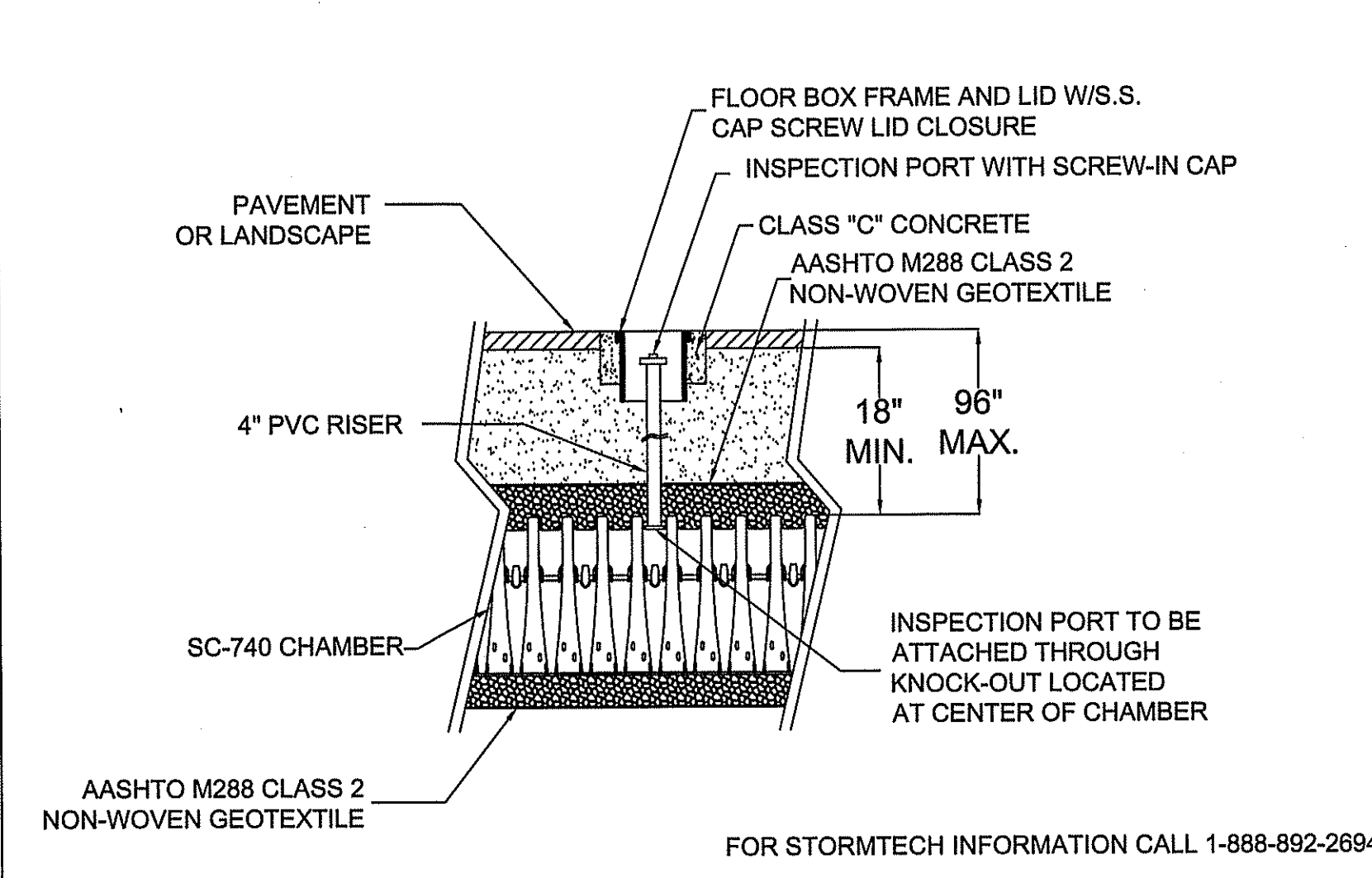
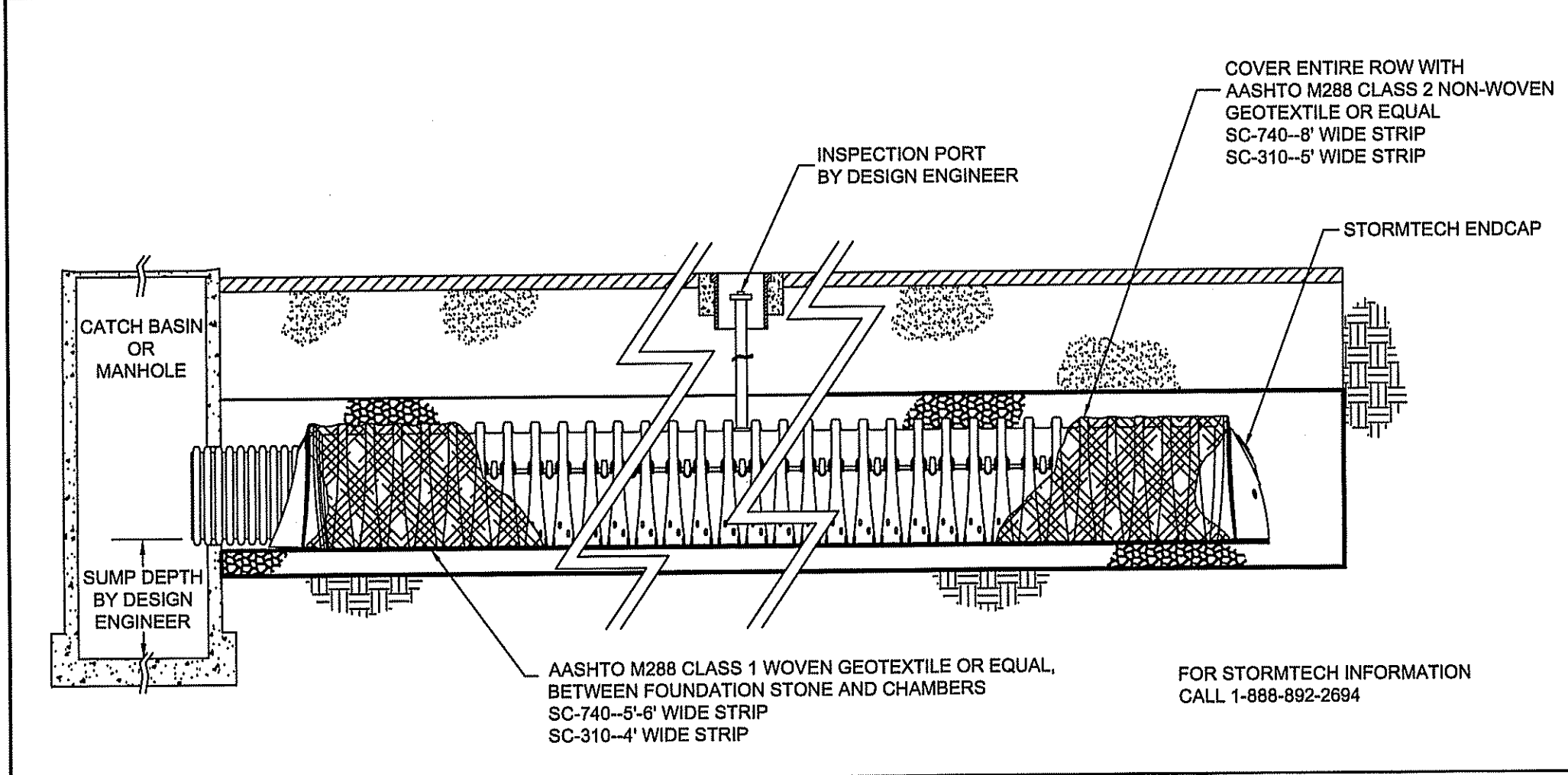
ST 3.0

STORMTECH ACCEPTABLE FILL MATERIALS



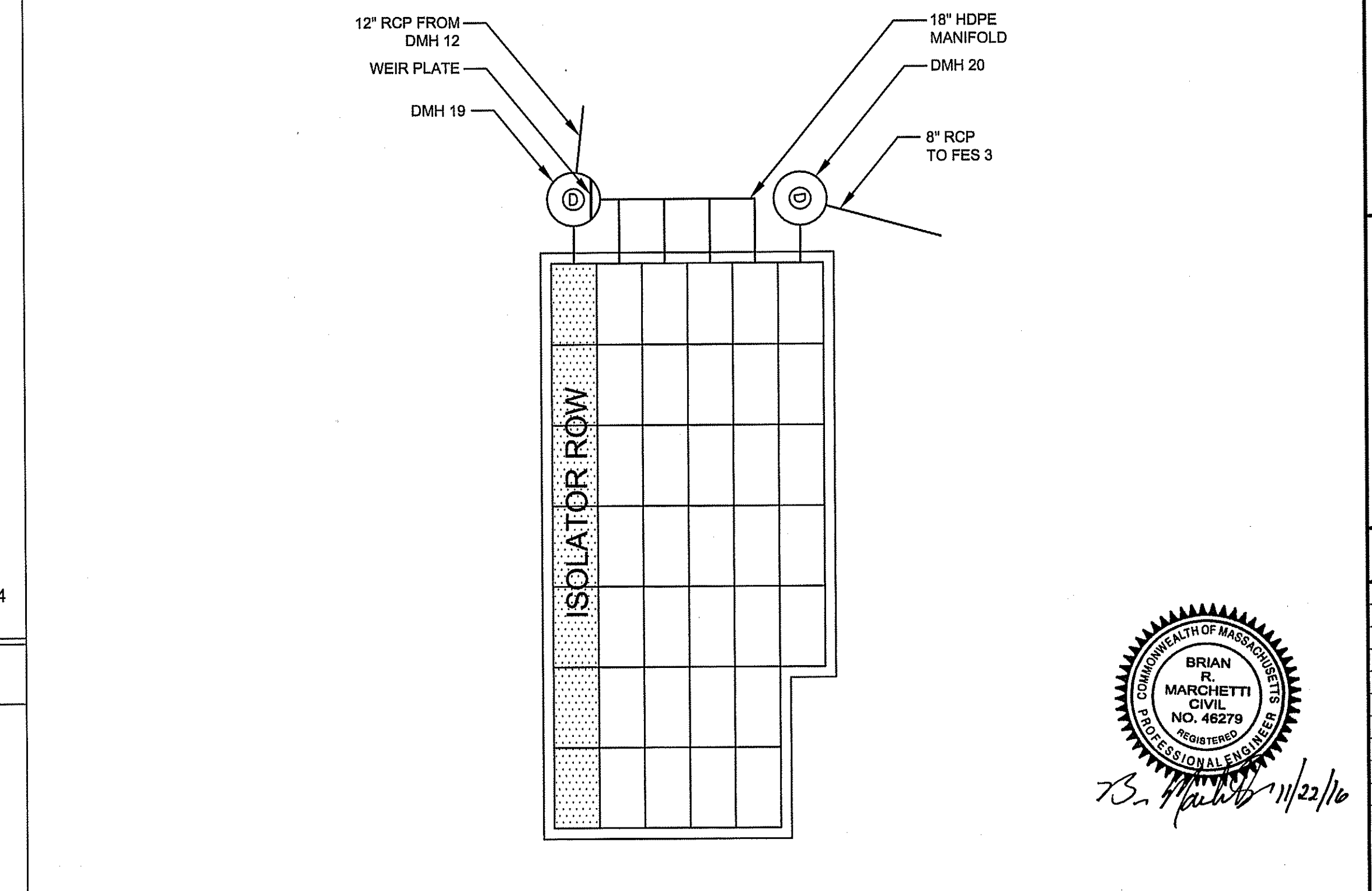
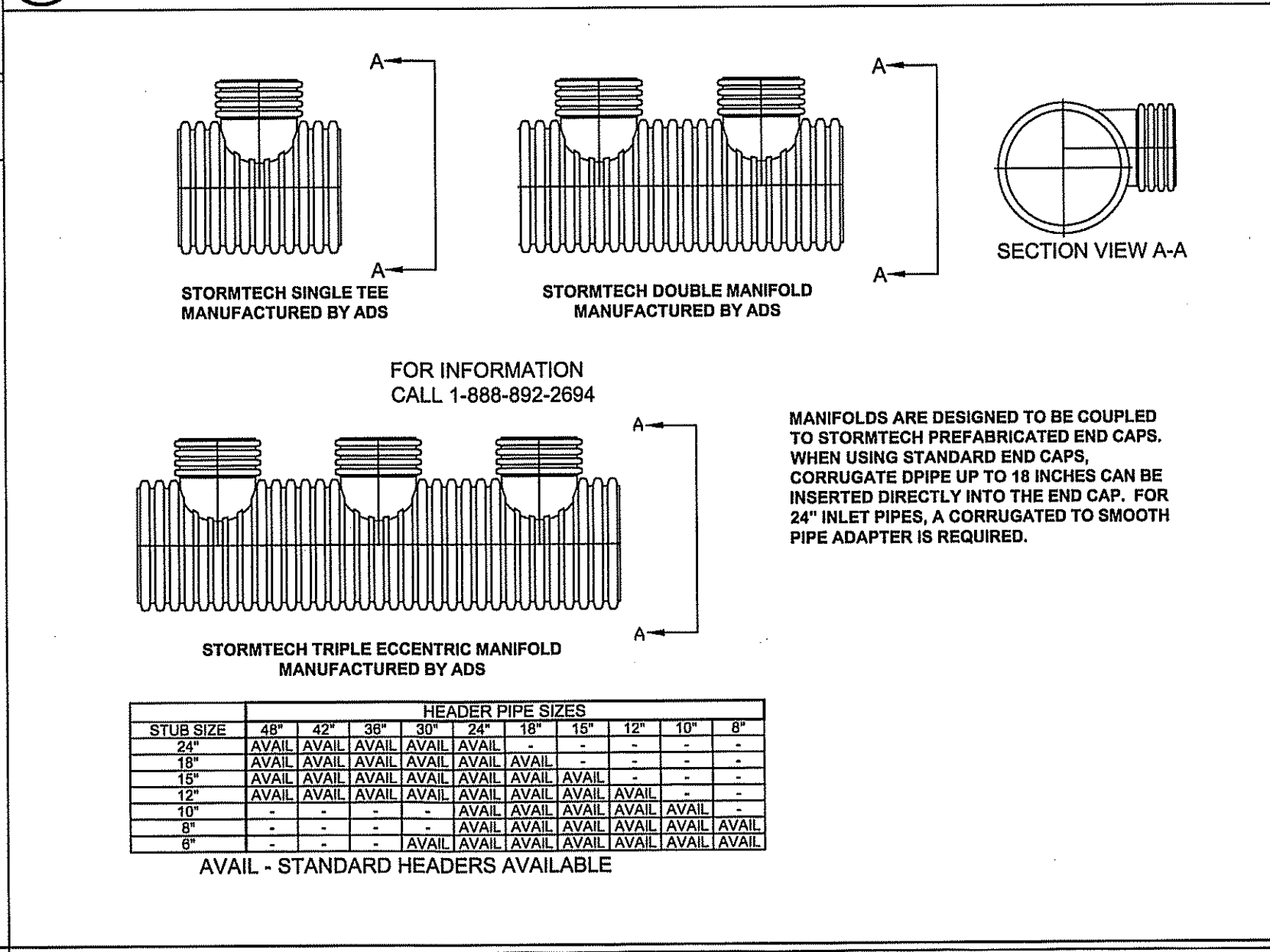
ST 4.0

STORMTECH ISOLATOR™ ROW MANIFOLD DETAIL



ST 5.0

STORMTECH INSPECTION PORT DETAIL



UNDERGROUND INFILTRATION BASIN (SC-740 - 40 CHAMBERS)

SCALE: 1"=10'

GENERAL NOTES:

SEE SHEET 28 FOR PLANNING BOARD CONDITIONS OF APPROVAL

CHAMBERS SHALL MEET THE DESIGN REQUIREMENTS AND SAFETY FACTORS SPECIFIED IN SECTION 12.12 OF THE LATEST EDITION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS LOADS SHALL BE CALCULATED IN ACCORDANCE WITH SECTION 3 AND SHALL INCLUDE H20 DESIGN TRUCK, IMPACT FACTOR, MULTIPLE PRESENCE, AND LANE LOAD.

ST 6.0

STORMTECH ISOLATOR™ ROW DETAIL

ST 7.0

ADS MANIFOLD DETAILS

ST 10.0

STORMTECH SC-740 CHAMBER LAYOUT

This drawing was prepared to support the design engineer for the proposed conversion. It is the ultimate responsibility of the design engineer to assure that the stormwater system's design is in full compliance with all applicable laws and regulations. It is the design engineer's responsibility to ensure that the StormTech products are designed in accordance with StormTech minimum requirements. StormTech LLC does not approve plans, sizing, or system designs. The design engineer is responsible for all design decisions.

REVISIONS	DATE
TOWN COMMENTS	11/22/2016

STORMTECH LLC

201 PEAVER RD SUITE 104

WETHERFIELD, CT 06099

TEL: 888-892-2694

TEL: 860-342-8401

FAX: 860-342-8401

WWW.STORMTECH.COM

DRAWING TITLE	
Stormtech Infiltration Basin Details	
STORMTECH SC-740 CHAMBER DETAIL SHEET	
DESIGNED BY	086-CDT06
DRAWN BY	JLL
CHECKED BY	BRM
SCALE	NTS
DATE	10/11/2016
PROJECT NO.	086
DRAWING NO.	27 of 28

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NOT FOR CONSTRUCTION

THESE PLANS WERE PREPARED FOR THE PURPOSE OF OBTAINING STATE AND LOCAL PERMITS AND ARE NOT INTENDED TO BE USED AS CONSTRUCTION DOCUMENTS.

PREPARED FOR:
BULL MEADOW, LLC.
2 RACHEL ROAD
BOYLSTON, MA 01505

1	11/22/2016	NO CHANGE
No.	Date	Revision



[Signature] 11/22/16

Drawn By: BRM Designed By: BRM Checked By: *[Signature]*

APPROVED BY THE GRAFTON PLANNING BOARD

DATE:

I, CLERK OF THE TOWN OF GRAFTON, MASSACHUSETTS HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE GRAFTON PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE NEXT TWENTY DAYS AFTER RECEIPT AND RECORDING OF SAID NOTICE.

TOWN CLERK _____ DATE _____
SUBJECT TO COVENANT DATED _____ RECORDED AT THE WORCESTER COUNTY REGISTRY OF DEEDS.
BOOK _____ PAGE _____ INSTRUMENT # _____

THIS PLAN WAS PREPARED IN ACCORDANCE WITH A MAJOR RESIDENTIAL DEVELOPMENT SPECIAL PERMIT GRANTED BY THE GRAFTON PLANNING BOARD AND FILED WITH THE TOWN CLERK ON MAY 19, 2015 AND RECORDED IN THE WORCESTER DISTRICT REGISTRY OF DEEDS BOOK 55687, PAGE 313.

SEE SHEET 28 FOR PLANNING BOARD CONDITIONS OF APPROVAL

McCarty Engineering, Inc.
Civil Engineers
42 Jungle Road, Leominster, MA 01453
phone:(978) 534-1318 fax: (978) 840-6907
www.mccartydb.com

Project Name
Estates at Bull Meadow
Definitive Plan
N. Grafton, MA 01536

Sheet Title
Conditions of
Approval

Job No: 066 Sheet No.
File Name: 066P-COND01 28
Date: October 11, 2016
Scale: NONE OF 28